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ATTORNEYS FOR DEFENDANTS  
DAVID J. SALINGER, M.D. and KEYSTONE  
ONCOLOGY, LLC

AMANDA BARGE and ARTHUR BARGE  
Plaintiffs

v.

DAVID J. SALINGER, M.D., WILLIAM YING,  
PH.D., KEYSTONE ONCOLOGY, LLC,  
COMPREHENSIVE PHYSICS AND  
REGULATORY SERVICES, LTD. and  
EQUIMED, INCORPORATED  
Defendants

IN THE UNITED STATES DISTRICT COURT  
FOR THE MIDDLE DISTRICT OF  
PENNSYLVANIA

NO. 1:CV-00-1881

JUDGE CONNER

JURY TRIAL DEMANDED

**FILED**  
HARRISBURG, PA

FEB 19 2003

MAN: G. DANDREA, CLERK  
Per                     

**PRETRIAL MEMORANDUM OF DEFENDANTS**  
**DAVID J. SALINGER, M.D. AND KEYSTONE ONCOLOGY, LLC,**  
**PURSUANT TO LOCAL RULE 16.6**

**I. DATE CONFERENCE WAS HELD BY COUNSEL:**

February 12, 2003

**II. STATEMENT OF FEDERAL COURT JURISDICTION:**

This Court has jurisdiction via diversity of citizenship, pursuant to 28 U.S.C.  
1332(a).

**III. A SUMMARY OF STATEMENT OF FACTS AND CONTENTIONS AS TO LIABILITY:**

Plaintiff Amanda Barge was diagnosed with a recurrent basal cell carcinoma on her right upper lip. After trying other methods of treatment for earlier occurrences of the cancer, Plaintiff was referred to the Heritage Hills Oncology Center and Dr. Salinger for radiation therapy. Approximately one month prior to Mrs. Barge's treatment, the Oncology Center had acquired a used superficial radiation unit which would be used in the irradiation of Plaintiff's cancer. The machine was calibrated for use by Defendant, William Ying, Ph.D. Dr. Ying produced pre-prepared dosage calculation forms for Dr. Salinger to use in determining the correct amount of time to reach the desired output for each radiation therapy session up to the dose prescribed of the entire treatment.

Plaintiff contends that she started noticing changes to her lip immediately following the first treatment. Dr. Salinger's does not recall and did not record in Mrs. Barge's treatment notes any alarming changes consistent with the Plaintiff's recollections. After Mrs. Barge received about ten (10) treatments it was determined that she was receiving doses of radiation higher than Dr. Salinger had prescribed. Subsequent testing of the unit indicated that the amount of radiation may have been as much as 5 times greater than what was initially believed. Plaintiff sustained a full thickness burn to the upper portion of her right lip and has undergone several surgeries to attempt to repair this damage and reconstruct the lip.

As respects Dr. Salinger, Plaintiffs primary contention is that Dr. Salinger failed to comport with requisite standards of care in failing to timely recognize that the reported symptomology resulted from the administration of excess radiation to Mrs. Barge. Plaintiffs further contend that, had Dr. Salinger related the symptomology to excessive radiation administration, that he should have and would have terminated further treatments before a significant degree of injury was sustained by Plaintiff.

As respects Defendant, Keystone Oncology, Inc., Plaintiffs claim that Keystone is vicariously liable for the actions or inactions of Dr. Salinger, i.e.... that Dr. Salinger was an employee of Keystone and was acting within the course and scope of the employer's business at the time he was rendering professional services to Mrs. Barge.

**IV. COMPREHENSIVE STATEMENT OF UNDISPUTED FACTS AS AGREED TO BY COUNSEL AT THE CONFERENCE OF ATTORNEYS REQUIRED BY LOCAL RULE 16.3.**

Please see Pre-Trial Conference Memorandum of Plaintiffs where comprehensive statement of undisputed facts as discussed in pre-trial meeting of counsel during conference held on February 12, 2003 is set forth.

**V. A BRIEF DESCRIPTION OF DAMAGES, INCLUDING, WHERE AVAILABLE:**

- (1) PRINCIPAL INJURIES SUSTAINED;**
- (2) HOSPITALIZATION AND CONVALESCENCE;**
- (3) PRESENT DISABILITY;**
- (4) SPECIAL MONETARY DAMAGES, LOSS OF PAST EARNINGS, MEDICAL EXPENSES, PROPERTY DAMAGES, ETC.;**
- (5) ESTIMATED VALUE OF PAIN AND SUFFERING, ETC.;**
- (6) SPECIAL DAMAGE CLAIMS**

(1) Principal injuries sustained by Plaintiff are alleged to be a full-thickness radiation burn in the area of the right upper lip and face, permanent scarring and disfigurement, physical pain, emotional anguish, loss of earnings and earning capacity, loss of the enjoyment of life, and past and future medical expenses. Plaintiff, Arthur Barge seeks damages for loss of consortium;

(2) Plaintiff alleges that as a result of the burn and requirement for reconstructive surgery thereon, that she has been required to undergo approximately twelve (12) surgeries associated with the revision and reconstruction of the affected area. Plaintiff further alleges that additional surgeries will be required to advance and finalize the reconstruction of the lip and face;

(3) Plaintiff claims that the necessity of lost time from work for reconstructive surgeries has resulted in her termination from her position as a bank teller with Westminster Union Bank. As of the time of the preparation of this Pre-trial conference memorandum, substantiation for such disability claim has not been produced by Plaintiffs.

(4) Plaintiff claims the following amounts as lost wages and past medical expenses associated with the injuries claimed as a result of the alleged negligence of defendants:

*Past Wage Loss* – Plaintiff claims that as a result of the various surgeries that she has been required to undergo that she has accrued a total of 650 hours of wage loss. Plaintiff alleges wage loss through December 31, 2001 in the amount of \$7,224.59;

*Medical Expenses* – Plaintiff claims total medical expenses to date of \$40,134.90. Pursuant to the provisions of 40 P.S. § 991.1817(a), a set-off is applicable against any sums awarded to Plaintiff for medical expenses that have been paid for by health insurance maintained by plaintiff. Pursuant to the explanation of benefits forms produced by Plaintiffs in discovery, it is believed that the applicable offset is in the approximate amount of \$37,852.46.

(5) The valuation of Plaintiffs' claims for pain and suffering are difficult to assess. To the extent that said damages form a component of Plaintiffs' demand, reference is made to Plaintiffs' Pre-trial Conference Memorandum.

(6) Plaintiff has provided a psychiatric assessment revealing the following diagnoses:

Axis I:	Depressive Disorder, Anxiety Disorder;
Axis II:	No Diagnosis;
Axis III:	Radiation burn 5/24-6/8/99 with multiple reconstructive surgical procedures; History of basal cell carcinoma; hypothyroidism

These diagnoses have led to the recommendation of medication administration and individual psychotherapy to assist in reducing her symptoms of anxiety and depression. To date, there is no evidence that Mrs. Barge has undertaken any psychotherapy, but she has been prescribed anti-depressive medications.

**VI. NAMES AND ADDRESSES OF WITNESSES, ALONG WITH SPECIALTIES AND QUALIFICATIONS OF EXPERTS TO BE CALLED.**

1. Amanda J. and Arthur K. Barge, as on cross – 3100 Coachman Way, Manchester, Maryland 21102;
2. David J. Salinger, M.D. - 165 Tiffany Lane. Gettysburg, PA 17325;
3. William Ying, Ph.D. – 1200 Dunsinane Hill, Chester Springs, Pa. 19425;
4. Abdurrahman Unal, M.D. - 775 South Arlington Avenue, Harrisburg, Pa. 17109;
5. Walter J. Curran, M.D. – Expert Witness – Radiation Oncology - 111 South 11<sup>th</sup> Street, Philadelphia, Pa. 19107; See Curriculum Vitae attached hereto as Exhibit “A” for qualifications;
6. Indra Das, Ph.D. – Expert Witness – Radiation Physics – 3400 Spruce Street, Philadelphia, Pa. 19104; See Curriculum Vitae attached hereto as Exhibit “B” for qualifications;
7. Any witnesses identified by Plaintiffs, whether called or not called as witnesses at the time of trial;
8. Any witnesses identified by Co-defendants William Ying, Ph.D. and Comprehensive Physics and Regulatory Services, Ltd.

**VII. SUMMARY OF TESTIMONY OF EACH EXPERT TO BE CALLED.**

Walter J. Curran, M.D. - Dr. Curran will testify that Dr. Salinger acted within the appropriate standard of care in his care and treatment of Plaintiff, Amanda Barge. Dr. Curran will opine that Dr. Salinger conformed with the requisite standard of skill and care expected of radiation oncologists practicing in the Commonwealth of Pennsylvania and in the United States with respect to each of the serial allegations of negligence raised in Plaintiffs’ Amended Complaint and with respect to those allegations raised in Plaintiffs’ expert reports authored by Drs. Tonneson and Brookland.

Indra Das, Ph.D. - Defendants Salinger and Keystone Oncology, LLC. have also identified Dr. Das as an expert on their behalf. Dr. Das will express opinions regarding the role of the radiation physicist in the compendium of care rendered to radiation patients, the nature and basis of the interaction between a radiation physicist and a radiation oncologist, the deviations in the applicable standards of care for radiation physicists evidenced by Dr. Ying in the professional services rendered in connection with Mrs. Barge’s radiation treatments, the causal relationship between Dr. Ying’s care and the injuries sustained by Plaintiff, and generally in accordance with all opinions expressed in his expert report dated October 14, 2002.

Defendants Salinger and Keystone Oncology, LLC. also reserve the right to utilize any testimony provided by any experts for Plaintiffs and/or Co-Defendants in this matter to the extent such testimony is relevant to the involvement of Dr. Salinger in his care of Amanda Barge or the damages sustained by the Plaintiffs.

**VIII. SPECIAL COMMENT ABOUT PLEADINGS AND DISCOVERY, INCLUDING DEPOSITIONS AND THE EXCHANGE OF MEDICAL REPORTS.**

Defendant Salinger and Keystone Oncology, LLC. reserve the right to utilize any discovery responses and/or deposition transcripts for purposes of cross examination and/or impeachment of any of Plaintiffs' witnesses. Defendants Salinger and Keystone Oncology, LLC. further reserve the right to object to the production of any reports, articles, abstracts, records, statements and documents not produced by Plaintiffs prior to the meeting of counsel which occurred on February 12, 2003.

**IX. SUMMARY OF LEGAL ISSUES INVOLVED AND LEGAL AUTHORITIES RELIED UPON.**

*APPLICATION OF PENNSYLVANIA LAW*

A federal court sitting in diversity jurisdiction shall apply the substantive law of the state with the most significant contact to the proceeding. Erie Railroad v. Tompkins, 304 U.S. 64, *cert denied*, 305 U.S. 639 (1938).

Accordingly, since the tort actions alleged in Plaintiffs' Complaint occurred in Pennsylvania and the time of the alleged tortuous action Defendants all resided in Pennsylvania, this Honorable Court should apply the substantive law of the Commonwealth of Pennsylvania in the adjudication of this matter.

*STANDARD OF CARE*

Under ☐ Pennsylvania law, a physician is required to possess and employ the skill and knowledge usually possessed by his peers in the diagnosis and treatment of his patients. Smith v. Yohe, 194 A.2d 167 (Pa. 1963). A physician is not the guarantor of the success of his treatment, but is required to exercise due care under the circumstances. Donaldson v. Maffucci,

153 A.2d 835 (Pa. 1959). A physician is not responsible for an unfortunate result in the absence of negligence. Hamil v. Bashline, 392 A.2d 1280 (Pa. 1978). The plaintiff in a malpractice action must prove either that the physician did not possess or employ the required skill or knowledge, or that he did not exercise the care and judgment of a reasonable person in like cases. Additionally, the injury complained of must have resulted from either the failure on the part of the physician to possess or employ the required skill or knowledge, or to exercise the care and judgment of a reasonable person in like circumstances. Grubb v. Albert Einstein Medical Center, 387 A.2d 480 (Pa. Super. 1978).

To establish a prima facie case of medical malpractice, a plaintiff must show:

- (1) a duty owed by the physician to the patient;
- (2) a breach of duty from the physician to the patient;
- (3) that the breach of duty was the proximate cause of, or a substantial factor in, bringing about the harm suffered by the patient; and
- (4) damages suffered by the patient that were a direct result of the harm.

Mitzelfelt v. Kamrin, 526 Pa. 54, 584 A.2d 888, 891 (1990).

In recognition that the practice of medicine is a profession requiring knowledge and expertise beyond the acumen of a lay person, a plaintiff must present:

an expert witness who will testify "to a reasonable degree of medical certainty, that the acts of the [defendant] physician deviated from good and acceptable standards".

Maurer v. Trustees of Univ. of Pa., 418 Pa. Super. 510, 516, 614 A.2d 754, 757, (1992), alloc. granted, 534 Pa. 640, 626 A.2d 1158 (1993), discontinued by appellant, (quoting Mitzelfelt v. Kamrin, 526 Pa. 54, 62, 584 A.2d 888, 892).

Although Pennsylvania courts have "phrased this requirement in a variety of ways,"<sup>1</sup> the necessity of expert testimony as to the standard of care nonetheless remains an integral element of a prima facie case of medical malpractice. The only exception to this rule applies when "the matter in dispute is so simple and the lack of skill or want of care so obvious as to be comprehensible by lay persons." Id. at 757, n.2. See also Jones v. Harrisburg Polyclinic Hospital, 496 Pa. 465, 437 A.2d 1134 (1981)(a plaintiff in a medical malpractice claim based upon res ipsa loquitur may still need to provide expert testimony if there is "no fund of common knowledge" from which a layman can reasonably draw the inference or conclusion of negligence). In Hoffman v. Mogil, 445 Pa. Super. 252, 665 A.2d 478 (1995), alloc. denied, 546 Pa. 666, 685 A.2d 546, (1996), our Superior Court held that "expert testimony is necessary to prove that a physician's care is substandard because, absent guidance of an expert, jurors are unable to make a decision with sufficient certainty so as to enable them to make legal judgments." Id. at 480.

#### CAUSATION

It is the well settled law in Pennsylvania that in order to establish a prima facie case of negligence, Plaintiff must prove that his injuries were proximately caused by the negligent conduct of the alleged tortfeasor. Flickinger Estate v. Ritsky, 452 Pa. 69, 305 A.2d 40 (1973). Liability may not be imposed merely upon proof of negligent conduct by the tortfeasor, but rather hinges upon Plaintiff's ability to prove a causal nexus between the negligent conduct and the Plaintiff's asserted injury. Hamil v. Bashline, 481 Pa. 256, 392 A.2d 1280 (1978); Accord: Maurer v. Trustees of the University of Pennsylvania, 418 Pa. Super. 510, 614 A.2d 754 (1992), appeal granted, 626 A.2d 1158 (1993).

In order to establish proximate cause, the Plaintiff has the burden of establishing with a "reasonable degree of medical certainty" that the injury in question resulted from the negligent act alleged. McMahon v. Young, 442 Pa. 484, 276 A.2d 534 (1971). Plaintiff must establish

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<sup>1</sup> Various phraseologies employed by the courts are: "acceptable medical practice," Id. (quoting Brannan v. Lankenau Hospital, 490 Pa. 588, 595, 417 A.2d 196, 199 (1980)); "a requisite standard of care," Id. (quoting Strain v. Ferroni, 405 Pa. Super. 349, 357, 592 A.2d 698, 703 (1991 )); a "standard of reasonable medical care," Id. (quoting Lira v. Albert Einstein Medical Center, 384 Pa. Super. 503, 509, 559 A.2d 550, 552 (1989), alloc. denied, 527 A.2d 1302 (1990)); and "standards of reasonable medical practice," Id. (quoting Corbett v. Weisband, 380 Pa. Super. 292, 301-2, 551 A.2d 1059, 1064 (1988)). alloc. denied, \_\_\_\_ Pa. Super. \_\_\_\_, 569 A.2d 1367, alloc. denied, Pa. Super. \_\_\_\_ 571 A.2d 383 (1989).



through expert testimony the "reasonable certainty" requirement and the inability of the Plaintiff to produce such a causal nexus with a reasonable degree of medical certainty is fatal to Plaintiff's ability to succeed. This need for a degree of certainty has been endorsed by the Pennsylvania Supreme Court in Churilla v. Barner, 269 Pa. Super. 100, 409 A.2d 83 (1979), where the Court noted that the "the plaintiff must produce evidence to support his version of the incident; theories as to what may have transpired...may not be employed as a substitute for such evidence." Id. at 85 (citations omitted).

Where Plaintiff's proof consists of nothing more than a mere inference that there is, or may be, a causal connection between an alleged act or omission of the Defendant and the Plaintiff's injuries, such proof is legally deficient. "The mere fact that an accident occurred does not give rise to an inference that the injured person was a victim of negligence." Swift v. Northeastern Hosp. of Phil., 456 Pa. Super. 330, 335, 690 A.2d 719, 722 (1997) (quoting Pitt. Nat'l. Bank v. Perr, 431 Pa. Super. 580, 584, 637 A.2d 334, 336 (1994)).

Once a plaintiff has produced expert testimony that the injury in question did, with a "reasonable degree of medical certainty", result from the negligent act alleged, the plaintiff must then satisfy his burden of persuasion. The plaintiff has the burden of persuading the jury that the plaintiff's injuries were in fact caused by the physician's negligent conduct. Hamil, *supra*. Causation is the triggering mechanism for the imposition of liability in tort and absent proof of a causal nexus, a *prima facie* case fails.

### **DAMAGES**

In determining whether to award economic damages, the jury must base its decision on evidence presented at trial. To recover economic damages, the "plaintiff must establish that [their] economic horizon has been shortened." Kearns v. Clark, 493 A.2d 1358, 1364 (Pa. Super. 1985); quoting: O'Malley v. Peerless Petroleum, Inc., 423 A.2d 1251, 1255 (Pa. Super. 1980). In order to do so, a plaintiff must present evidence that is "legally sufficient [to afford] the fact finder 'a reasonably fair basis for calculation'." Fish v. Gosnell, 463 A.2d 1042, 1051 (Pa. Super. 1983); quoting: Kaczkowski v. Bolubasz, 421 A.2d 1027, 1030, (Pa. 1980). The Plaintiff is not "entitled to have mere conjecture, either in the witness box or jury room, accepted as proof" of a claim for economic damages. Baccare v. Mennella, 369 A.2d 806, 808 (Pa. Super. 1976); quoting: Rice v. Hill, 172 A. 289 (Pa. 1934); accord Hoffman v. Sterling Drug, Inc., 458 F.2d 132 (3d Cir. 1973).

**X. STIPULATIONS DESIRED.**

It is requested that the parties stipulate as to the authenticity of the medical records, employment records and additional documentation exchanged by the parties through discovery to date. Without limiting the availability to identify additional records, it is requested that the parties stipulate to the authenticity of the following records, charts and documents:

1. Medical Records from Heritage Hills Oncology Center;
2. Medical Records of Marilyn Miller, M.D.;
3. Medical Records of D.V. Faustino, M.D.;
4. Medical Records of Lawrence Feldman, M.D.;
5. Medical Records of Johns Hopkins Hospital; Department of Plastic, Reconstructive and Maxillofacial Surgery
6. Curriculum Vitae of Walter J. Curran, M.D.
7. Expert report of Walter J. Curran, M.D.
8. Curriculum Vitae of Indra Das, Ph.D.,
9. Expert report of Indra Das, Ph.D.
10. Curriculum Vitae of David J. Salinger, M.D.
11. All discovery requests and responses thereto as exchanged by the parties in this matter to date.

**XI. ESTIMATED NUMBER OF TRIAL DAYS.**

It is anticipated that trial in this matter will take approximately 4-5 trial days.

**XII. ANY OTHER MATTERS PERTINENT TO THE CASE TO BE TRIED.**

The only additional matter to be brought to the attention of the Court is a request for latitude in calling potential expert witnesses out of order due to professional commitments of those witnesses.

**XIII INDEX OF ATTACHMENTS:**

APPENDIX "A" – CURRICULUM VITAE OF WALTER J. CURRAN, M.D.;

APPENDIX "B" – CURRICULUM VITAE OF INDRA DAS, PH.D.;

APPENDIX "C" – EXPERT REPORT OF WALTER J. CURRAN, M.D.;

APPENDIX "D" - EXPERT REPORT OF INDRA DAS, PH.D.;

APPENDIX "E" - STATEMENT OF COUNSEL THAT PERSON OR COMMITTEE  
WITH SETTLEMENT AUTHORITY HAS BEEN NOTIFIED OF  
THE REQUIREMENTS OF AND POSSIBLE SANCTIONS  
UNDER LOCAL RULE 16.2

Exh A

CURRICULUM VITAE

SEPTEMBER, 2001

WALTER J. CURRAN, JR., M.D.

Home Address: 1801 Delancey Place  
Philadelphia, Pennsylvania 19103

Office Address: Department of Radiation Oncology  
Bodine Center for Cancer Treatment  
Thomas Jefferson University Hospital  
111 S. 11th Street  
Philadelphia, Pennsylvania 19107-5097  
(215) 955-6700  
(215) 955-0412 (FAX)  
e mail - walter.curran@mail.tju.edu

Social Security Number: 034-40-2896

Education:

1969-73	A.B. Dartmouth College
1978-82	M.D. Medical College of Georgia

Postgraduate Training and Fellowship Appointments:

1982-83	Internship, Internal Medicine, Presbyterian-University of Pennsylvania, Philadelphia, PA
1983-86	Residency, Department of Radiation Therapy, Hospital of the University of Pennsylvania, Philadelphia, PA
1985-86	Chief Resident, Department of Radiation Therapy, Hospital of the University of Pennsylvania, Philadelphia, PA

Faculty Appointments:

1973-74	St. Francis School New Haven, CT
1974-77	La Grange Boys Junior High School La Grange, GA
1977-78	Chenery Middle School Belmont, MA

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1985-86	Assistant Instructor, Department of Radiation Therapy, University of Pennsylvania School of Medicine
1986-1992	Assistant Professor, Department of Radiation Oncology University of Pennsylvania School of Medicine Philadelphia, PA
1992-1994	Associate Professor, Department of Radiation Oncology, Medical College of Pennsylvania Philadelphia, PA
1994-	Professor and Chairman, Department of Radiation Oncology Jefferson Medical College of Thomas Jefferson University Philadelphia, PA
1997-	Clinical Director, Kimmel Cancer Center Jefferson Medical College of Thomas Jefferson University Philadelphia, PA

Hospital Appointments:

1986-1994	Staff Radiation Oncologist Department of Radiation Therapy Fox Chase Cancer Center, Philadelphia, PA
1986-1994	Research Staff Jeanes Hospital Philadelphia, PA
1994-	Director Bodine Center for Cancer Treatment Thomas Jefferson University Hospital Philadelphia, PA
3/8/96-	Consulting Radiation Oncologist Wills Eye Hospital Philadelphia, PA
1995-	Consulting Radiation Oncologist Chestnut Hill Hospital Philadelphia, PA
1994-	Consulting Physician Methodist Hospital Philadelphia, PA
7/24/97-6/30/00	Consulting Physician Episcopal Hospital Philadelphia, PA
1996-	Consulting Physician Lower Bucks Hospital

Specialty Certification:

1986-	American Board of Radiology (Therapeutic Radiology)
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Licensure:

Pennsylvania - MD 029941 E

National/International Society and Cooperative Group Positions:

	<u>Radiation Therapy Oncology Group</u>
1989-	Lung Cancer Committee, Brain Tumor Committee
1990-	Publications Committee
1990-1997	Chairman, Brain Tumor Committee
1990-	Research Strategy Committee
1992-1997	Deputy Group Chairman
1992-	Executive Committee
1997-	Group Chairman
1997-	Chairman, Steering Committee
	<u>Pediatric Oncology Group</u>
1988-	Hodgkins Disease Committee
1990-	Ependymoma Working Group
	<u>American College of Radiology</u>
1989-	Committee for Radiation Oncology Equipment and Manufacturers Liaison Sub-Committee
1994-2001	Expert Panel on Radiation Oncology -Lung Working Group
1999-	Committee on Practice Accreditation in Radiation Oncology
	<u>American Society for Therapeutic Radiology and Oncology</u>
1991	Scientific Meeting Abstract Review Committee
1992-1995	Constitution and Bylaws Committee
1991-	Moderator, CNS Tumor Session, Annual Meeting, Washington, D.C.
1992,1999	Moderator, Lung Cancer Session, Annual Meeting, San Diego, CA
1993-	Scientific Program Committee
1993-1994	Moderator, CNS Tumor Session, Annual Meeting, New Orleans, LA
	<u>American Cancer Society</u>
1992	Clinical Oncology Session Moderator Science Writers Meeting
	<u>Radiological Physics Center</u>
1992	American Association of Physicists in Medicine Radiation Therapy Committee
	<u>Tobacco-Related Disease Research Program</u>
1993-1994	<u>University of California</u> Study Section Member Tumor Immunology and Therapy
	<u>National Cancer Institute</u>
1994-1995	Site Visit Team Chairperson

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	P-01 Program Project
1994-1995	Ad Hoc Member
	Cancer Center and Research Programs Review Committee
1995-	Ad Hoc Member
	Oncological Sciences Initial Review Group/Radiation Study Section
	<u>National Institutes of Health</u>
1996-	Special Reviewer
	Neurologic Science-3 Study Section
	<u>InterSociety Council for Radiation Oncology</u>
1988-1989	Subcommittee on Photodynamic Therapy

Awards, Honors and Membership in Honorary Societies:

1969-	High School Class Valedictorian
1973-	Cum Laude Baccalaureate
1985-86	American Cancer Society Fellowship
1986-	Certificate of Merit for Scientific Exhibit at RSNA Scientific Assembly
1989-	ASTRO - ESTRO Travel Grant

Membership in Regional Societies

1994-	Philadelphia Roentgen Ray Society (Member-Radiation Oncology Program Committee)
1994-	Pennsylvania Radiologic Society
1994-1997	Pennsylvania Oncology Society (Member-Executive Committee)
1998-	Pennsylvania Society of Oncology Hematology

Membership in Professional and Scientific Societies:International/National Societies:

American College of Radiology  
 American Society of Therapeutic Radiologists and  
 Oncologists  
 Pediatric Oncology Group  
 North American Hyperthermia Group  
 American Society of Clinical Oncology  
 Radiation Therapy Oncology Group  
 Eastern Cooperative Oncology Group  
 American Society of Clinical Oncologists  
 International Association for the Study of Lung Cancer  
 Coalition of National Cancer Cooperative Groups, Inc.  
 Canadian Association of Radiation Oncology (Honorary Membership)

Academic Committees:

1986-1994	Clinical Research Review Committee Fox Chase Cancer Center
1988-1990	Utilization Review Committee Fox Chase Cancer Center
1989-1990	Committee to Review the Department of Dermatology University of Pennsylvania School of Medicine
1990-1994	Chairman Research Review Committee
1992-1994	Department of Radiation Oncology Fox Chase Cancer Center Director Clinical Fellowship Program Department of Radiation Oncology Fox Chase Cancer Center
1994-	Executive Committee Jefferson/Kimmel Cancer Center
1994-	Executive Committee Jefferson Medical School
1994-	Executive Council Thomas Jefferson University Hospital
1994-	Cancer Committee Thomas Jefferson University Hospital
1997-	Chairman Cancer Committee Thomas Jefferson University Hospital
1994-1997	Director of Ambulatory Care Jefferson/Kimmel Cancer Center
1994-	Co-Director of Brain Tumor Center Wills Eye Hospital/Thomas Jefferson University
1995-	Committee on Faculty Appointments and Promotions Jefferson Medical College of Thomas Jefferson University
1995-1998	Steering Committee for M.D./Ph.D. Programs College of Graduate Studies Thomas Jefferson University
1996-1997	Secretary and Member of Executive Committee Jefferson Faculty Foundation
1997-2000	Chairperson Committee on Faculty Appointments and Promotions Jefferson Medical College
1997-	Clinical Director Kimmel Cancer Center at Jefferson
1997-	Medical Director Jefferson Cancer Network
1999-	Reviewer ACR Philadelphia Office Management Review Committee
1999-	Patterns of Care Committee Advisory Board American College of Radiology
2000-	Committee on Practice Accred.- Rad. Oncology Accred. Commission on Standards & Accreditation



2000-

Committee on Economics  
 Commission on Medical Physics  
 American College of Radiology  
 Philadelphia Office Review Committee  
 American College of Radiology

**GRANT SUPPORT**ACTIVE

CA 21661 (Curran)	1/1/97 - 12/31/01	35%
NIH/CTEP	\$7,092,792	
<i>Radiation Therapy Oncology Group (RTOG)</i>		

Main Goal: RTOG is an NCI-funded cooperative group seeking to improve upon the outcome of selected cancer patients through well-executed clinical trials. Dr. Curran serves as Group Chairman and full Member Principal Investigator. The department also receives support for participation in clinical trials.

080-34000 C07004 (Curran)	7/01/97 - 6/30/01	5%
ME 00-127	\$500,000	
<i>Pennsylvania Department of Health</i>		

Main Goal: Cancer Center Support for Basic Science, Medical Science and Cancer Prevention and Control.

CA 37422 (Curran)	6/01/94 - 5/31/01	10%
NCI/DCPC	\$821,464	
<i>RTOG Community Clinical Oncology Research Base</i>		

Main Goal: This program seeks to expand the RTOG mission to community-based cancer programs and to cancer prevention and control strategies.

Bristol Myers Squibb	8/1/97 - 7/31/01	5%
(ACR Protocol 427)	\$2,038,300	
<i>Phase II Clinical Trial of TAXOL, Paraplatin, and Radiation Therapy (LAMP)</i>		

Main Goal: This is a national randomized Phase II trial of three chemo-radiation strategies for Stage III non-small cell lung cancer. Dr. Curran serves as Principal Investigator of the coordinating and statistical centers at the American College of Radiology and Co-Principal Investigator of the trial.

Bristol Myers Squibb	4/1/00 - 3/31/01	5%
(ACR Protocol 428)	\$620,316	
<i>Phase II trial of split course radiation therapy with weekly Taxol (paclitaxel) for poor performance</i>		

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*or elderly non-small cell lung cancer patients.*

080-34000-A39301	7/1/98 – 6/30/02	<5%
Pharmacyclics (Curran)	\$25,000	
<i>Phase III Randomized Trial of Gadolinium Texaphyrin (PCI-P120)</i>		

Main Goal: Dr. Curran serves as Study Co-Chair for this protocol that is an international Phase III randomized trial of Gadolinium Texaphyrin as a radiation sensitizer in patients receiving whole brain radiation therapy for the treatment of brain metastases.

080-34000-H03001	5/31/99 – 4/30/01	<5%
Boehringer Ingelheim (Curran)	\$38,069	
<i>Phase I Intensive Pharmacokinetic Study of Porfiromycin in Head &amp; Neck Cancer &amp; other cancer patients with solid tumors who receive RT</i>		

080-34000-H17301	6/1/00 – 5/30/01	<5%
EntreMed (Curran)	\$407,560	
<i>Phase I single center open label dose escalation safety and pharmacodynamic study of the combination of recombinant human angiostatin proteint and RT for the treatment of patients with cancer.</i>		

IntraBiotics Pharmaceutical, Inc.	7/1/00 – 6/30/01	5%
	\$955,195	

*Phase III clinical trial entitled protocol PG-015: A multi-national, multi-center, "double-blind" placebo-controlled, randomized, Phase III clinical trial to defer efficacy and safety of IB-367 rinse in reducing the severity of oral mucositis in patients receiving radiation therapy for head and neck malignancy.*

1PO1CA72027-01A2 (Curran)	9/30/00 – 8/31/05	15%
NCI	\$700,151	

*Relevance of genomic alteration in colorectal cancer*

Main Goal: To explore the hypothesis that the genetic alterations implicated in the aneuploid-and MMR-pathways of tumor progression are relevant to the diagnostic and therapeutic approaches of patients with sporadic colorectal cancers.

C-2000-025	5/1/01 – 4/30/03
ALZA Corporation	\$73,100

*A phase II placebo-controlled trial of once daily methylphenidate in cancer patients with symptoms of fatigue related to radiation therapy*

**PENDING**

P30CA56036 (Croce)	4/1/01 – 3/31/06	10%
NCI Cancer Center Support Grant (Croce)	\$3,322,850	
<i>Translational Research in Cancer</i>		

Main Goal: Dr. Curran serves as clinical director of the Kimmel Cancer Center and in this role facilitates the translation of basic science into clinical research.

**OVERLAP**

If grant is awarded, we will make the necessary reductions in current support.

**PRIOR**

080-34000-D62801 (Curran)	1/1/96 - 12/31/97	10%
Bristol Myers Squibb	\$250,000	
<i>Radiation Oncology Research and Development</i>		

Main Goal: Clinical Trial Development-This program supports efforts to evaluate the integration of paclitaxel and ionizing radiation in the management of malignancies of the upper aerodigestive tract.

080-34000-D65101 (Curran)	1/1/96 - 12/31/97
Sanofi Winthrop	\$83,520
<i>Phase I Clinical Trial-Tirapazamine</i>	

Main Goal: Phase I escalating - dose study of orally administered Tirapazamine in cancer subjects receiving radiotherapy.

080-34000-D69001 (Curran)	8/12/96 - 8/11/97
Tap Holdings, Inc.	\$47,964
TNP-470 Clinical Trial	

Main Goal: Safety and efficacy of TNP-470 when administered to newly diagnosed patients with Glioblastoma Multiforme (GBM) in post-radiation setting.

080-34000-Z11401 (Choy)	5/1/96 - 4/30/98
Vanderbilt University	\$6,400
Phase III Clinical Trial of Paclitaxel	

Main Goal: Phase III Trial of Radiation with or without concurrent Paclitaxel for patients with brain metastasis.

RO1 PI: Robert Jenkins	Mayo Clinic	10/1/96-9/30/97	5%
PI: Walter J. Curran		12/1/97-11/30/98	
Subcontract Total		\$9,224.00	

CA50906 (Jenkins)	1/13/95-11/30/99	<5%
NIH/NCI	\$5,268	
Investigation of the Molecular Pathology of Gliomas.		

**ADVISORY POSITIONS:**

1997-1998	Rhone-Polenc Rohrer Oncology Advisory Committee
1998-	Boehringer-Ingelheim Consultant
1996-	Bistol-Myers Squibb Lung Cancer Advisory Board
1999	Entremed Oncology Advisory Board
1999-	Eli Lilly Lung Cancer Advisory Board

**Lecture by Invitation:**

November, 1986	"Contrast-enhanced MR findings after cerebral radiation in an animal model" RSNA Scientific Assembly Chicago, IL
January, 1988	"Training and continuing education in hyperthermia" Clini-term Corporation's First International Users Meeting and Hyperthermia Symposium Maui, HA
April, 1988	"The clinical use of hyperthermia" Pennsylvania Society of Radiologic Technologists Annual Meeting, King of Prussia, PA
May, 1988	"Status of hyperthermia in radiation therapy" Twentieth Annual National Conference on Radiation Control, Nashville, TN
November, 1988	"Oral complications of radiation therapy" St George's Society for Oral Cancer Philadelphia, PA
May, 1989	"Intraoperative radiation therapy" "Status of Hyperthermia in Cancer Therapy" The Florida Society of Radiologic Technologists 41st Annual Meeting Lake Buena Vista, FL
October, 1989	"Radiation therapy in GI cancers" "Radiation in prostate cancer", Toward 2000 V, Fox Chase Cancer Center

	Philadelphia, PA
April, 1990	"Radiation therapy in endometrial cancer" in "Update on Endometrial Cancer" Northeastern Ohio Universities College of Medicine Rootstown, OH
May, 1990	"Organ preservation in laryngeal carcinoma" in "Organ preservation in modern cancer management" University of Pennsylvania, Philadelphia, PA and Locally Advanced Cancer Washington, DC
October, 1990	"Issues in the management of locally advanced lung cancer" Panel discussion, First International Consensus Workshop on Radiation Therapy in the Treatment of Metastatic and Locally Advanced Cancer Washington, D.C.
October, 1990	"The diagnostic and therapeutic uses of radiolabeled antibodies" Pediatric Oncology Group Surgery Committee St. Louis, MO
November, 1990	"Radiation therapy in the management of lung cancer" Annual Oncology Meeting, Lee Memorial Hospital, Ft. Myers, FL
December, 1990	"Management of head and neck malignancies" Montgomery Cancer Center Norristown, PA
May, 1991	"Advances in the treatment of non-small cell lung cancer" Visiting Professor, North Carolina Baptist Hospital Oncology Grand Rounds, Bowman-Gray School of Medicine Winston-Salem, NC
July, 1991	"Clinical Hyperthermia: An External View" Invited Congress Lecture, Ninth International Congress of Radiation Research Toronto, Canada
September, 1991	"Current Status of Brain Tumor Trials" ACR/RTOG Symposia on Clinical Trials, American College of Radiology Annual Meeting Minneapolis, MN
October, 1991	"Results from RTOG Malignant Glioma and Brain Metastases Trials" Ninth International Conference on Brain Tumor Research and Therapy

November, 1991	Asilomar, CA "Radiation Therapy for Nonsmall Cell Lung Carcinoma" Current Problems in Cancer Therapy University of Medicine & Dentistry of New Jersey New Brunswick, NJ
November, 1991	"Advances in the Treatment of Malignant Gliomas" Annual Oncology Conference Charlotte, NC
October, 1992	"Recent Development of the Radiation Therapy Oncology Group" European Organization for Research and Treatment of Cancer, Semi-Annual Meeting Dusseldorf, Germany
November, 1992	"Strategies for Prevention and Symptom Management of Radiation Therapy-Related Toxicities" Refresher Course, ASTRO Scientific Program, San Diego and New Orleans
April, 1993	"Current Status of Clinical Research for Malignant Glioma" Piedmont Oncology Group Semi-Annual Meeting Winston-Salem, North Carolina
May, 1993	Discussant, Small Cell Lung/CNS Tumor Slide Session, ASCO Annual Meeting Orlando, FL
September, 1993	"RTOG Trials in Malignant Glioma: An Update" ACR/RTOG Symposia on Clinical Trials American College of Radiology Annual Meeting Orlando, FL
October, 1993	"Strategies for Prevention and Symptom Management of Radiation Therapy-Related Toxicities" Refresher Course, ASTRO Scientific Program San Diego and New Orleans
October, 1993	"Management of Locally Advanced Non-Small Cell Lung Cancer" Palliative Care Panel ASTRO Scientific Program New Orleans, LA
November, 1993	"Prognostic Factors in Patients with Malignant Glioma" Tumors of the Central Nervous System Harvard Medical School Boston, MA
February, 1994	"Recent Developments within the Radiation Therapy Oncology Group"

	Mid-Atlantic Society of Radiation Oncologists Fredericksburg, VA
March, 1994	"Research Initiatives for Adult Brain Tumors" ASTRO Spring Program Chicago, IL
March, 1994	"Malignant Glioma" "Advances in Non-Small Cell Lung Cancer" Visiting Professor Rush-Presbyterian-St. Luke's Medical Center Chicago, IL
April, 1994	"New Therapeutic Strategies in Radiation Therapy" Multimodality Therapy of Chest Malignancies: Update '94 Harvard Medical School Boston, MA
April, 1994	"Combined Modality Therapy for Lung Cancer" American Radium Society Bermuda
August, 1994	"Advances in Non-Small Cell Lung Cancer" Southwestern Regional Cancer Center Lawton, OK
December, 1994	"RTOG Research in Glioblastoma Multiforme" Seattle Brain Tumor Working Group Seattle, WA
December, 1994	"Advances in Radiotherapeutic Approaches to Gastro- intestinal Cancers" Medical Center of Delaware Annual Hematology/Oncology Conference Wilmington, DE
January, 1995	"Locally Advanced Non-Small Cell Lung Cancer" Philadelphia Roetgen Ray Society Philadelphia, PA
January, 1995	Visiting Professor Albert Einstein Medical Center Philadelphia, PA
January, 1995	"Controversies in the Management of Stage III Non-Small Cell Lung Cancer" Cancer Center Grand Rounds University of Pennsylvania Cancer Center Philadelphia, PA
January, 1995	

	"Treatment Strategies for Non-Small Cell Lung Cancer" Visiting Professor University of Maryland School of Medicine Baltimore, MD
February, 1995	"Neuro-Oncology Trials with the Radiation Therapy Oncology Group" Institute of Neurology and Neurosurgery Mexico City, Mexico
March, 1995	Visiting Professor University of Michigan School of Medicine Ann Arbor, MI
April, 1995	Visiting Faculty "Investigational Approaches to Malignant Glioma" Albert Einstein Medical Center Philadelphia, PA
April, 1995	"Clinical Research in Adult Brain Tumors" New York Roetgen Ray Society New York, New York
May, 1995	"Investigative Approaches to Non-Small Cell Lung Cancer" Pennsylvania Radiologic Society Annual Meeting Philadelphia, PA
June, 1995	"Clinical Trials for Malignant Glioma Patients" Society of University Neurosurgeons (SUN) Annual Meeting Philadelphia, PA
July, 1995	"Stereotactic Radiation" Neurology Grand Rounds Christiana Hospital Newark, DE
September, 1995	"National Clinical Trials for Malignant Glioma: Department of Neurology Grand Rounds Jefferson Medical College Philadelphia, PA
September, 1995	"Update of Brain Tumor Research" ACR/RTOG Symposia on Clinical Trials American College of Radiology Annual Meeting Boston, MA
September, 1995	"Combined Modality Therapy of NSCLC" St. John Hospital Detroit, MI



October, 1995 "Therapy of Malignant Glioma: Controversies in Radiotherapy"  
IX Pan-American Congress of Neurology  
Guatemala City, Guatemala

October, 1995 "Management of Adults with Malignant Glioma"  
Panel Chairman and Discussant  
ASTRO Scientific Program  
Miami Beach, FL

October, 1995 "Selection of Appropriate Endpoints in Clinical Oncology Research"  
Tenth Annual Simon Kramer Lecture  
Thomas Jefferson University  
Philadelphia, PA

October, 1995 "Update on RTOG Brain Tumor Trials"  
Clinical Research Panel Discussion-11th International Conference  
on Brain Tumor Research and Therapy  
Napa, CA

November, 1995 "The Influence of RTOG Protocols on the Treatment of  
Brain Tumors"  
Combined Radiation Oncology/Medical Oncology Clinical  
Research Conference  
Vanderbilt University  
Nashville, TN

November, 1995 "Therapeutic Approaches to Locally Advanced Non-Small  
Cell Lung Cancer"  
Annual Oncology Program  
Lee Memorial Hospital  
Fort Myers, FL

January, 1996 "Issues in Clinical Trials"  
University of Pennsylvania School of Veterinary Medicine  
Philadelphia, PA

February, 1996 "Malignant Glioma Clinical Trials"  
Tumor Board  
Thomas Jefferson University Hospital  
Philadelphia, PA

February, 1996 "Clinical Trial Methodology"  
Institutional Review Board  
American College of Radiology  
Philadelphia, PA

February, 1996 "Clinical Trials for Non-Small Cell Lung Cancer"  
Methodist Hospital, Grand Rounds  
Philadelphia, PA

February, 1996

March, 1996 "Therapeutic Approaches to Non-Small Cell Lung Cancer"  
Nazareth Hospital, Medical Grand Rounds  
Philadelphia, PA

April, 1996 "Taxol and Ionizing Radiation in Non-Small Cell Lung Cancer"  
Fox Chase Cancer Center Consensus Conference  
St. Croix, US Virgin Islands

May, 1996 "Clinical Experience with 3D CRT Treating Brain Tumors"  
Second International Symposium on 3D Radiation Treatment  
Planning and Conformal Therapy  
St. Louis, MO

May, 1996 Discussant  
Small Cell Lung Cancer Slide Presentations  
ASCO 32nd Annual Meeting  
Philadelphia, PA

August, 1996 Guest Speaker  
7th Canadian Neuro-Oncology Meeting  
"RTOG Trials" and "Prognostic Factors"  
Montreal, Quebec, Canada

"Malignant Gliomas"  
First Symposium on Concomitant Chemoradiation  
Vanderbilt Cancer Center  
Nashville, TN

September, 1996 "Protection Against Cancer-Therapy Induced Toxicities"  
Harper Hospital Grand Rounds-Invited Speaker  
Detroit, Michigan

October, 1996 "Current Status of RTOG and Intergroup CNS Trials"  
SWOG Brain Tumor Committee Meeting  
Chicago, IL

October, 1996 "3 D Conformal Radiotherapy for Primary Brain Tumors"  
1997 ACQSIM User's Meeting  
Los Angeles, CA

October, 1996 "Imaging Response is Highly Predictive of Survival of  
Malignant Glioma Patients Treated with Standard or Hyper-  
fractionated RT and Carmustine in RTOG 9006"  
ASTRO's 38th Annual Meeting  
Los Angeles, CA

November, 1996 "Combined Modality Treatment of Nonsmall Cell Lung Cancer"  
Invited Speaker-Lehigh Valley Hospital  
Allentown, PA

November, 1996

November, 1996 "Nonsmall Cell Lung Cancer"  
New York Roentgen Ray Society Invited Speaker  
Manhattan, NY

January, 1997 "Tumors of the CNS"  
Harvard Medical School  
Boston, MA

February, 1997 "Investigative Approaches to Locally Advanced Non-Small Cell  
Lung Cancer"  
Georgetown University Hospital  
Washington, DC

March, 1997 "New Therapeutic Approaches to Malignant Gliomas"  
"Management of Locally Advanced Non-Small Cell Lung Cancer:  
Hospital of the University of Pennsylvania  
Philadelphia, PA

March, 1997 "Clinical Research Advances and Opportunities in Radiation Oncology"  
Association of Community Cancer Centers-23rd Annual Meeting  
Washington, DC

March, 1997 "Present and Future Therapeutic Approaches to Malignant Glioma"  
ASTRO Spring Meeting  
Dallas, TX

April, 1997 "Integration of Chemotherapy and Radiation for Non-Small Cell Lung  
Cancer"  
Medivision-Broadcast via MedEd Net Satellite Network-May 6, 1997  
Philadelphia, PA

May, 1997 "Advances in the Management of Locally Advanced Lung Cancer"  
Riddle Memorial Hospital  
Media, PA

May, 1997 "Lung Cancer: Taking Control"  
Nationwide Summit on Lung Cancer-Videoconference-NIH  
Bethesda, MD

May, 1997 "New Therapeutic Strategies for Patients with Malignant Glioma"  
Oncology Data Services-Continuing Education Conference  
Philadelphia, PA

June, 1997 "Overview: Management for Unresectable Non-Small Cell Lung  
Cancer"  
Bristol-Myers Squibb Oncology Physicians Speaker Program  
Washington, DC

June, 1997 "New Approaches to Locally Advanced Lung Cancer"  
Grand View Hospital-Invited Speaker  
Sellersville, PA

August, 1997  
"Current Perspectives in the Treatment of Lung Cancer"  
8th World Conference on Lung Cancer  
Dublin, Ireland

September, 1997  
Invited Speaker Keble College "Brain Tumour Research and Therapy"  
12th International Conference on Brain Tumour Research and  
Therapy  
Oxford, England

September, 1997  
Invited Speaker "Clinical Research Opportunities Throught  
Radiation Oncology Groups"  
2nd Joint Scientific Meeting of POS/PSHO  
York, PA

October, 1997  
Lung Cancer Symposium "Combined Modality Therapy of Lung Cancer"  
David L. Rike Cancer Center  
Dayton, OH

October, 1997  
Refresher Course "RTOG: Updated Results of Randomized Trials"  
39th Annual ASTRO Meeting  
Orlando, FL

October, 1997  
Educational Symposium-Advances in Therapy: "Protecting Against  
Toxicities of Radiotherapy"  
Alza/US Bioscience  
Orlando, FL

October, 1997  
Seminar: "Management of Locally Advanced Non-Small Cell Lung  
Cancer-Controversy and Consensus"  
Bristol-Myers Squibb Oncology  
Orlando, FL

November, 1997  
Advances in Cancer Therapy "Radiation Approaches to NSCLC"  
Medical College of Virginia  
Williamsburg, VA

November, 1997  
"Management of Unresectable NSCLC"  
Physician Speaker Program: Multi-Disciplinary Management  
of Non-Small Cell Lung Cancer  
Bristol-Myers Squibb Oncology  
Dallas, TX

December, 1997  
"New Approaches to Malignant Brain Tumors"  
Mercer Cancer Center  
Trenton, NJ

January, 1998  
"Current Radiation Therapies and the Importance of Radioprotectant"  
Ethyol Investigators' Workshop  
Mediphacs-Healthmark  
Puerto Rico

February, 1998

"Oral Agents as Radiation Sensitizers"  
Sarah Cannon-Minnie Pearl Cancer Center Conference  
Cancun, Mexico

March, 1998

"Overview-management of Unresectable Disease"  
Bristol-Myers Squibb Oncology Physicians Speaker Program  
Pasadena, CA

March, 1998

Fox Chase Cancer Center and Free University Hospital Investigators'  
Workshop and Consensus Conference  
St. Thomas, US Virgin Islands

April, 1998

"New Therapeutic Approaches to Malignant Glioma"  
"Innovations in Radiation Delivery Techniques"  
"Issues in the Management of Locally Advanced Non-small Cell  
Lung Cancer"  
"Selected Research Issues of the Radiation Therapy Oncology Group"  
The Advances in Oncology Lecture-McGill University  
Montreal, Quebec

April, 1998

"New Developments in the Treatment of Locally Advanced Non-Small  
Cell Lung Cancer"  
Clinical Lecture-Audioconference Series  
Meniscus Educational Institute  
Philadelphia, PA

May, 1998

"Clinical Trials Update for Brain Tumors"  
Canadian Neuro-Oncology Meeting  
Hamilton Regional Cancer Center  
Niagara-on-the-Lake, Ontario

May, 1998

"Radiotherapy and Combined Treatment Modalities: The Role of  
Ethylol"

Investigators' Meeting, ALZA Corporation  
Los Angeles, CA

May, 1998

"Phase I trial of oral Tirazone (TM) (tirapazamine) Shows Good  
Bioavailability and Tolerance"  
Los Angeles, CA

June, 1998

"Selected Multimodality and Radiation Oncology ASCO 1998  
Presentations"  
ASCO Review Course  
Flint, MI

June, 1998

"The Changing Standard of Care for Advanced Stage Lung Cancer"  
Regional Cancer Center  
Erie, PA

June, 1998

"Management of Unresectable Non-small Cell Lung Cancer"

Course entitled: Progress in the Management of Locally Advanced Non-small Cell Lung Cancer  
Kimmel Cancer Center, Jefferson Cancer Network and The Office of Continuing Medical Education of Jefferson Medical College Philadelphia, PA

August, 1998 "Use of Tirapazamine as a Radiosensitizing Agent"  
2<sup>nd</sup> Annual Symposium on Concomitant Chemoradiotherapy:  
Vanderbilt University  
Nashville, TN

August, 1998 Symposium: "Advances in the Multimodality Treatment of Locally Advanced Non-small Cell Lung Cancer"  
University of Southern California School of Medicine  
Pasadena, CA

September, 1998 "Combined Chemotherapy and Radiation Therapy in Non Small Cell Lung Cancer"  
Annual Pennsylvania Oncology Society Joint Scientific Meeting  
Pittsburgh, PA

September, 1998 "Current Status of Brain Tumor Treatment"  
3<sup>rd</sup> International Symposium on 3-D Treatment Planning  
University of North Carolina  
Chapel Hill, NC

September, 1998 "Radiation Standards and Innovations in NSCLC"  
Co-Med Communications  
New York, NY

October, 1998 "Update on Treatment of Lung Cancer"  
Grand Rounds, Department of Medicine  
Lankenau Hospital  
Wynnewood, PA

October, 1998 "Advances in Non-Small Cell Lung Cancer: Old Myths, New Therapies"  
1998 Lung Cancer Symposium  
Kaiser Permanente  
Oakland, CA

October, 1998 "Role of Radiation Oncologist and Radiation Oncology Staff: Risks/Benefits"  
Introduction to Stereotactic Radiosurgery Program  
Christiana Care Health Services  
Newark, DE

October, 1998 "CNS Malignancies"  
Delaware Valley Hematology/Oncology Fellows' Symposia  
Ortho Biotech  
Philadelphia, PA

October, 1998 "RTOG: Updated Results of Randomized Trials  
ASTRO Refresher Course

40<sup>th</sup> Annual Scientific Meeting of ASTRO  
"Where Do We Stand in the Radiation Therapy of Malignant Gliomas?"  
Tumors of the Central Nervous System  
ASTRO Categorical Course  
Phoenix, AR

October, 1998

"Current Concepts in Cytoprotective Therapy:  
Alza Pharmaceutical  
Alexandria, VA

November, 1998

A Systems Approach to the Management of Glial Neoplasms:  
"RTOG Protocols for the Treatment of Malignant Gliomas"  
NYU Medical Center  
New York, NY

December, 1998

RSNA 84<sup>th</sup> Scientific Assembly and Annual Meeting  
"Apoptosis as a predictor of taxol induced radiosensitization"  
Chicago, ILL

December, 1998

"Updates in the Treatment of Non-Small Cell Lung Cancer"  
American Cancer Society Lecture  
Philadelphia, PA

December, 1998

"Advances in the Management of Locally Advanced Non-Small  
Cell Lung Cancer"  
Cleveland Clinic Foundation Visiting Professor  
Cleveland, OH

January, 1999

"Non-Surgical Management of Stage III Disease"  
Postgraduate Institute for Medicine  
Videoconference  
New York, NY

January, 1999

"Update on New Therapies for Malignant Gliomas"  
Department of Neurology Grand Rounds  
Thomas Jefferson University Hospital  
Philadelphia, PA

February, 1999

"Combined Modality Therapy of Unresectable NSCLC: Current  
Status and Lessons Learned"  
Physician Speakers Program  
Miami, FL

February, 1999

"Multi-Modality Management of Non-Small Cell Lung Cancer"  
Jefferson Cancer Network Program  
Absecon, NJ

March, 1999

"Lung Cancer Session" (Chair)  
The Fox Chase Cancer Center Paclitaxel Investigators' Workshop  
Lana'i, Hawaii

March, 1999

"Role of Radiation Therapy in Lung Cancer"

	ASTRO Spring Refresher Course New Orleans, LA
March, 1999	"Management Strategies for Unresectable Stage III Disease" Diagnostic and Treatment of Neoplastic Disorders 25 <sup>th</sup> Annual Symposium Johns Hopkins Oncology Center Baltimore, MD
March, 1999	"Management of Unresectable Locally Advanced Non-Small Cell Lung Cancer" The Bays Medical Society Panama City, FL
April, 1999	"Innovative Radiosurgical and Radiotherapeutic Approaches to Brain Tumors: Update 1999" Jefferson Cancer Network Philadelphia, PA
April, 1999	"Role of Radiotherapy in Treatment of Lung Cancer" Lung Cancer: State-of-the Art Diagnosis and Therapy Mayo Clinic "New Therapeutic Approaches to Malignant Glioma: Any Real Progress?" Moertel Lecture, Mayo Foundation Rochester, MN
April, 1999	"New Approaches to Locally Advanced Non-Small Cell Lung Cancer" Tumor Board Conference John and Dorothy Morgan Cancer Center, Lehigh Valley Hospital Allentown, PA
April, 1999	"New Approaches to Malignant Brain Tumors" Thomas Jefferson University Hospital Radiology Research Conference Philadelphia, PA
May, 1999	"Clinical Experience with 3-DCRT Treating Brain Cancer" International Symposium 3-D Conformal Radiation Therapy and Intensity Modulated Radiation Therapy in the New Millennium  Baylor College of Medicine Houston, TX
May, 1999	"Advances in Multimodality Therapy of Early-Stage Non-Small Cell Lung Cancer" Oncology Live™ Interactive Audioconference Presented by University of Colorado Health Sciences Cancer Center in Denver, CO
May, 1999	"Pre-Treatment Evaluation and Clinical Management of Weight Loss in Non-Small Cell Lung Cancer"



	Oncology Live™ Interactive Audioconference Presented by University of Colorado Health Sciences Cancer Center in Denver, CO
May, 1999	"Changing Perspectives in Advanced Non-Small Cell Lung Cancer: Molecular Markers, Chemoradiotherapy, and Novel Therapeutic Approaches" ASCO 35 <sup>th</sup> Annual Meeting – Education Session Speaker Atlanta, GA
June, 1999	"Combined Modality and Radiotherapy Update" ASCO Review Program Jefferson Cancer Network Philadelphia, PA
June, 1999	"Update on Management of Stage III Non-Small Cell Lung Cancer" Blood Club of Richmond Richmond, VA
June, 1999	"Combined Modality Therapy for Unresectable NSCLC: Lessons Learned and Where are we Going" Physicians Speaker Program Chicago, IL
September 1999	"Advances in Multimodality Therapy of Early-Stage Non-Small Cell Lung Cancer" Course #101 Oncology Live™ Interactive Audioconference Presented by University of Colorado Health Sciences Cancer Center in Denver, CO
November, 1999	"The Importance of Radio/Chemotherapy in Stages IIIA and IIIB in NSCLC" Symposium, University of Montreal Montreal, Quebec
February, 2000	"The Role of Therapeutic Radiation for Anterior Skull Base Tumors" Neuro-Oncology Symposium Cleveland Clinic Foundation Naples, FL
March, 2000	"Head and Neck Cancer: Toxicity Prevention" Interactive Network for Continuing Education Audioconferences (12) Philadelphia, PA
March, 2000	"Combined Modality Therapy in NSCLC: The RTOG Experience (9410 Update)" The Fox Chase Cancer Center Investigators' Workshop and Consensus Conference Lana'i, Hawaii
April, 2000	

April, 2000 "Emerging Non-Operative Strategies for Non-Small Cell Lung Cancer" Symposium entitled: Combined Modality Therapies in the Treatment of Lung Cancer  
The Valley Hospital  
Ridgewood, NJ

April, 2000 "Diagnosis and Treatment of Non-Small Cell Lung Cancer"  
Mortons of Chicago  
Baltimore, MD

April, 2000 "Advances in Multi-Modality Therapy for NSCLC"  
Grand Rounds  
Good Samaritan Hospital  
Baltimore, MD

April, 2000 "Advances in the Treatment of Lung Cancer"  
Symposium-Oncology for the Primary Care Physician  
Mercy Hospital of Philadelphia  
Philadelphia, PA

April, 2000 "Current Options in the Management of Stage III Lung Cancer" Symposium  
University of Toronto  
Toronto, CN

May, 2000 "Advances in Multi-Modality Approaches to NSCLC"  
York Hospital  
York, PA

May, 2000 "Phase III comparison of sequential vs concurrent chemoradiation for patients with unresected stage III non-small cell lung cancer (NSCLC): Initial Report of Radiation Therapy Oncology Group (RTOG) 9410"  
Oral Abstract Presentation  
36<sup>th</sup> Annual ASCO Meeting  
New Orleans, LA

June, 2000 "Combined Modality and Radiotherapy Update"  
ASCO Review Program  
Jefferson Cancer Network  
Philadelphia, PA

July, 2000 "The Management of Malignant Gliomas"  
Kimmel Cancer Center Grand Rounds  
Jefferson Medical College  
Philadelphia, PA

September, 2000 "Combined Modality Approaches for the Management of Lung Cancer"  
"Maximizing Chemotherapy and XRT in Stage IIIB Disease"  
Abstract Presentation "RTOG 9410"  
9<sup>th</sup> World Conference on Lung Cancer  
Tokyo, Japan

September, 2000  
"The Radiation Therapy Oncology Group: Where have we  
been and where are we going?"  
CARO Lecture  
Canadian Association of Radiation Oncologists  
Edmonton, Canada

October, 2000  
"Advances in Multi-Modality Therapy for NSCLC"  
Satellite Symposium  
Boston, MA

October, 2000  
"Important Clinical Trials for the New Millennium"  
42<sup>nd</sup> Annual Scientific Meeting of ASTRO  
Boston, MA

November, 2000  
"Issues in the Management of Locally Recurrent Disease"  
Controversies in Combined Modality Approaches for Locally  
Advanced Disease"  
2000 ASCO Clinical Practice Forum  
Orlando, FL

November, 2000  
2000 NIH Consensus Conference on Adjuvant Therapy for  
Breast Cancer - Panel Member  
Bethesda, MD

December, 2000  
"New Approaches to Locally Advanced NSCLC"  
Bristol-Myers Squibb Oncology Visiting Faculty Program  
Saint Barnabas Medical Center  
Livingston, NJ

January, 2001  
"Management of Locally Advanced NSCLC"  
The George Washington University Medical Center  
Washington, DC

January, 2001  
"Management of Locally Advanced NSCLC"  
Washington Hospital Center  
Washington, DC

March, 2001  
"RTOG's Contribution to Radiation Oncology Clinical  
Practice"  
ASTRO Spring Program  
Chicago, IL

March, 2001  
"Clinical Trials in Community Practice: An Overview"  
"Non-Small Cell Lung Cancer"  
Northeast Regional Practice Guidelines Retreat  
New York, NY

April, 2001  
Lung Cancer Progress Group Roundtable Participant  
National Cancer Institute  
Chantilly, VA

April, 2001

May, 2001	"A Review of Pivotal Data for Amifostine in Head and Neck Cancer" Radio Broadcast-Videoconference Alza Pharmaceutical Washington, DC
June, 2001	"Non-small Cell and Small Cell Lung Cancer" Poster Presentation 37 <sup>th</sup> Annual ASCO Meeting San Francisco, CA
June, 2001	"Treatment of Localized Head and Neck Cancer: The Role of Radiotherapy" Network for Medical Communication and Research New York, NY
June, 2001	Workshop on EGFr inhibitor PK1166 Consultant Novartis Oncology Washington, DC
July, 2001	1 <sup>st</sup> Investigators' Congress on Radioprotection Program Chair and Director MedImmune & Alza Pharmaceutical St. Croix, US Virgin Islands
July, 2001	"Multimodality Therapy of Lung Cancer: State of the Art" 2 <sup>nd</sup> International Lung Cancer Congress Kauai, Hawaii
August, 2001	"Multimodality Therapy with Gemzar in NSCLC" 2 <sup>nd</sup> International Lung Cancer congress Lilly Oncology Roundtable Discussion Kauai, Hawaii
August, 2001	"Evolving Research Issues for Malignant Gliomas" Kimmel Cancer Center Grand Rounds Thomas Jefferson University Philadelphia, PA
September, 2001	"Cooperative Group Update: SCLC Trials Ongoing and Planned" Pharmacia Lung Cancer Advisory Board Meeting Cape Cod, MA
September, 2001	"Challenging Cases in Patient Managements" Network for Medical Communication & Research Las Vegas, NV

W. J. CURRAN, M.D.

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"Current Approaches to Combined Modality Therapy  
for Unresectable Stage III NSCLC"  
Bristol-Myers Squibb Oncology  
Las Vegas, NV

Editorial Board:

1993	Radiation Oncology Investigations
1995	International Journal of Radiation Oncology Biology and Physics
1997	Journal of Radiosurgery
1999	Neuro-Oncology
1999	Lung Cancer (Clinical)
1999	Cancer Investigation
1999	Advancements for Administrators in Radiology
1999	Radiotherapy and Oncology
2000	Current Treatment Options in Oncology
2001	Lung Cancer (Associate editor for Radiation Oncology)

Advisory Board:

Advance for Administration in Radiology  
Pharmacia Oncology Advisory Board  
Entremed, Inc. Oncology Advisory Board

Manuscript Review:

Journal of Clinical Oncology  
Pediatrics  
Cancer Research  
Journal of Cancer  
Radiation Therapy Oncology Group  
Radiotherapy and Oncology  
Cancer  
Journal of Neuro-Oncology  
American Journal of Clinical Oncology

Chairman or Co-Chairman of Clinical Protocol:

**CLOSED**

Curran, W., Langer, C.: Phase II Evaluation of Concurrent 5-Fluorouracil, Cisplatin, Etoposide, and Radiation Therapy for Locally Advanced, Unresectable Non-Small Cell Bronchogenic Carcinoma. Fox Chase Cancer Center Protocol 87866. Active March 1987-June 1990.

Wimmer, R., Curran, W., Leventhal, B.: Phase II Study of Hodgkin's Disease in Relapse, Pediatric Oncology Group Study 8827. Activated by POG, March 1988.

Curran, W., Langer, C., Hanks, G.: Phase II Evaluation of Interstitial Micro-

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- Curran, W.J.**, Cox, J.D., Azarnia, N., Byhardt, R.W., Shin, K.H., Emani, B.: Comparison of RTOG and AJCC staging systems among patients with non-small cell lung cancer receiving hyperfractionated radiation therapy: A report of RTOG 83-11. ESTRO Annual Meeting, Italy, 1990
- Lanciano, R.M., **Curran, W.J.**, Greven, K.M., Fanning, J., Stafford, P., Randall, M.E., Hanks, G.E.: Influence of grade, histologic subtype, and timing of radiotherapy on outcome among patients with stage II carcinoma of the endometrium. SGO Scientific Program, 1991
- Taylor, J.S., Vigneron, D.B., Nelson, S.J., Murphy-Boesch, J., Stoyanova, R., Kessler, H.B., **Curran, W.J.**, Coia, L., Brown, T.R.: Studies of cytosolic  $Mg^{2+}$  and free ATP concentrations in normal human brain and brain tumors. Society of Magnetic Resonance in Medicine Annual Meeting, New York, 1990
- Curran, W.J.**, Moldofsky, P., Solin, L.: Further observations on the predictive value of perfusion lung scans on post-irradiation pulmonary function among patients with bronchogenic carcinoma. ASTRO Scientific Program, Miami, 1990
- Curran, W.J.**, Scott, C.B., Nelson, J.S., Weinstein, A., Nelson, D.F., Fischbach, A.J., Chang, C., Rotman, M., Asbell, S., Powlis, W.D.: Does extent of surgery influence outcome for astrocytoma with atypical or anaplastic foci (AAF)? A report from 3 Radiation Therapy Oncology Group (RTOG) trials. Amer. Neuro. Ass'n Annual Meeting, Seattle, 1991
- Dougherty, M.J., **Curran, W.J.**, Herbert, S.H., Stafford, P.M., Sandler, H.M., Rosenthal, S.A., Hughes, E.N., McKenna, W.G., Keller, S.: Should patients with post-resection locoregional recurrence of lung cancer receive aggressive therapy? ASTRO Scientific Program, Washington, DC, 1991
- Herbert, S.H., **Curran, W.J.**, Rosenthal, S.A., Stafford, P.M., Sandler, H.M., Hughes, E.N., McKenna, W.G.: Adverse influence of young age on outcome in patients with non-small cell lung carcinoma (NSCLC) treated with radiation therapy (RT) alone. American Radium Society Scientific Program, Orlando, 1992

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- Nelson, D.F., **Curran, W.J.**, Nelson, J.S., Weinstein, A.S., Martz, K.L., Ahmad, K., Keller, J.W., Murray, K.: Hyperfractionation in malignant glioma, report of a dose searching phase I/II protocol of the Radiation Therapy Oncology Group, ASCO Annual Meeting, Washington, D.C., 1990
- King, W., Johnson, M., Gatenby, R., **Curran, W.**: A modeling and experimental study of temperature profiles in tumors during photodynamic therapy. National Heat Transfer Conference, Philadelphia, 1989
- Langer, C.J., **Curran, W.J.**, Blankstein, K., Nealy, S., Keller, S.K., Hanks, G.E., Comis, R.L.: Phase II evaluation of concurrent 5-fluorouracil, cisplatin, etoposide, and thoracic radiation for locally advanced unresectable non small cell bronchogenic carcinoma, ASCO Annual Meeting, Washington, D.C., 1990
- Langer, C.J., **Curran, W.J.**, Catalano, R.B., Fowler, W., Keller, S.K., Nash, S., Blankstein, K., Comis, R.L.: Low locoregional relapse rate and significant morbidity observed in a Phase II trial of simultaneous thoracic radiation therapy (RT) and multi-agent chemotherapy for locally advanced non-small cell lung cancer (NSCLC). ASTRO Scientific Program, Washington, DC, 1991
- Epstein, B.E., Scott, C.B., Sause, W.T., Rotman, M., Phillips, T.J., Janjan, N., Davis, L.W., Selim, H., Mohiuddin, M., Wasserman, T., **Curran, W.J.**: Improved survival in patients with unresected solitary brain metastasis using accelerated hyperfractionated radiation therapy (RT) at total doses of 54.4 Gy and greater: Results of RTOG 85-28. ASTRO Scientific Program, Washington, DC, 1991
- Simpson, J., Horton, J., Scott, C.B., Nelson, J.S., Weinstein, A.S., **Curran, W.J.**, Fischbach, A.J., Chang, C.C., Rotman, M., Nelson, D.F.: Influence of location and extent of surgical resection on survival of patients with glioblastoma multiforme: Results of 3 consecutive RTOG trials. ASTRO Scientific Program, San Diego, 1992
- Herbert, S.H., Solin, L.J., Hoffman, J.P., Schultz, D.J., **Curran, W.J.**, Lanciano, R.M., Rosenblum, N., Hogan, M., Eisenberg, B., Hanks, G.E.: Volumetric analysis of small bowel displacement from radiation portals with the use of a pelvic tissue expander. ASTRO Scientific Program, San Diego, 1992
- Curran, W.J.**, Scott, C.B., Horton, J., Nelson, J.S., Weinstein, A.S., Nelson, D.F., Fischbach, A.J., Chang, C.H., Rotman, M., Asbell, S.O., Krisch, R.: Recursive partitioning analysis of 1,578 patients on 3 Radiation Therapy Oncology Group (RTOG) malignant glioma trials. ASCO Annual Meeting, San Diego, 1992
- Sause, W., Scott, C., Krisch, R., Rotman, M., Snead, P., Murray, K., Davis, L., **Curran, W.**, Choi, K., Mohiuddin, M., Grigsby, P.: RTOG 85-28: Accelerated fractionation in treatment of patients with supratentorial brain metastases. Am. Radium Soc. Annual Meeting, Montreal, 1991
- Curran, W.J.**, Scott, C.B., Nelson, J.S., Martin, L.A., Weinstein, A.S.,

- Phillips, T.L., Murray, K., Fischbach, A.J., Yakar, D., Schwade, J.G., Corn, B.W., Nelson, D.F.: Survival comparison of radiosurgery eligible and ineligible malignant glioma patients treated with hyperfractionated radiation therapy and BCNU: A report of RTOG 83-02. ASTRO Scientific Program, San Diego, 1992
- Vigneron, D.B., Taylor, J.S., Nelson, S.J., Murphy-Boesch, J., Kessler, H.B., **Curran, W.J.**, Coia, L., Brown, T.R.: Studies of metastatic brain tumors using three dimensional  $^{31}\text{P}$  metabolite imaging. Society of Magnetic Resonance in Medicine Annual Meeting, New York, 1990
- Fowler, W.C., Langer, C.J., **Curran, W.J.**, Keller, S.M., Nash, S., Catalano, R.B., Comis, R.L.: Excessive morbidity and mortality of pneumonectomy following concurrent chemotherapy (5-fluorouracil, cisplatin, etoposide) and high-dose thoracic radiation for locally advanced non-small cell lung cancer. ASCO Annual Meeting, Houston, TX, 1991
- Komaki, R.K., Pajak, T.F., Byhardt, R.W., Emami, B., Asbell, S.O., Roach, M., Pedersen, J.E., **Curran, W.J.**, Herskovic, A.M., Russell, A.H., Cox, J.D.: Analysis of early and late deaths on RTOG non-small lung carcinoma 1991 trials vs. CALGB 8433. ASTRO Scientific Program, Washington, DC, 1991
- Byhardt, R.W., Scott, C.B., Ettinger, D.S., **Curran, W.J.**, Doggett, R.L., Coughlin, C., Scarentino, C., Rotman, M., Emami, B.: Concurrent hyperfractionated irradiation and chemotherapy for non-small cell lung cancer. Preliminary report of a phase I/II Radiation Therapy Oncology Group Trial. American Radium Society, Bermuda, 1994
- Fischbach, J., Scott, C.B., Murray, K., Gaspar, L., Nelson, J.S., Farnan, N., **Curran, W.J.**: Central pathology review in clinical trials of malignant glioma. American Radium Society, Bermuda, 1994
- Murray, K.J., Nelson, D.F., Isaacson, S., Scott, C., Fischbach, A.J., Porter, A., Farnan, N., **Curran W.J.**: Quality adjusted survival analysis of malignant glioma patients treated with twice-daily radiation (RT) and carmustine: A report of Radiation Therapy Oncology Group 83-02. ASTRO Scientific Program, New Orleans, 1993
- Emami, B., Scott, C., Perez, C., Asbell, S., Swift, P., Grigsby, P., Montesano, A., Rubin, P., **Curran, W.J.**, Del Rowe, J., Arasto, H., Fu, K., Moros, E.: Phase III study of interstitial thermoradiotherapy compared with interstitial radiotherapy alone in the treatment of recurrent or persistent human tumors: A prospectively controlled randomized study by the Radiation Therapy Oncology Group. ASTRO Scientific Program, New Orleans, 1993
- Byhardt, R.W., Scott, C.B., Ettinger, D.S., **Curran, W.J.**, Doggett, R.L.S., Coughlin, C., Scarantino, C., Rotman, M., Emami, B.: Concurrent hyperfractionated irradiation and chemotherapy for non-small cell lung cancer. Preliminary report of a phase I/II RTOG trial. Proc Am Soc Clin Oncol, New Orleans, 1993
- Lee, D.J., Pajak, T., Marcial, V.A., Fu, K.K., Rotman, M., Cooper, J.S., Ortiz, H.G., Beitler, J.J., Abrams, R.A., **Curran, W.J.**, Coleman, C.N., Wasserman, T.H.: Results of an RTOG Phase III trial comparing radiotherapy plus etanidazole (SR 2508) with radiotherapy alone for locally advanced head and neck carcinomas. ASTRO Scientific Program, San Francisco, 1994 (Plenary Session)
- Sause, W., Scott, C., Taylor, S., Johnson, D., Livingston, R., Turrisi, A.,



- Komaki, R., Emani, B., **Curran, W.**, Byhardt, R., Fisher, B.: Preliminary results of an intergroup randomized trial of chemoradiation versus radiation alone for locally advanced non-small cell lung cancer. Proc Am Soc Clin Oncol, Dallas, 1994
- Fein, D.A., Lee, W.R., Hanlon, A.L., Ridge, J.A., Langer, C.J., **Curran, Jr., W.J.**, Coia, L.R.: Pretreatment hemoglobin level influences local control and survival of T1-T2 squamous cell carcinomas of the glottic larynx. 37th Annual Meeting of ASTRO, Miami Beach, FL, October, 1995
- Das, I., Downes, M.B., Corn, B.W., **Curran, Jr., W.J.**, Werner-Wasik, M.W., Andrews, D.W.: Characteristics of a dedicated linear accelerator-based stereotactic radiosurgery-radiotherapy unit (Clinac-600SR). 2nd Congress of the International Stereotactic Radiosurgery Society - Poster presentation. Boston, Massachusetts, 1995
- Werner-Wasik, M., Scott, C., Nelson, D., Gaspar, L., Murray, K., Fischbach, A., Nelson, J., Weinstein, A., **Curran, W.**: Final report of a phase I/II trial of hyperfractionated radiation therapy with carmustine for adults with supratentorial malignant glioma: RTOG 83:02. Amer. Radium Soc., Paris, France, 1995
- Choucair, A., Scott, C., Urtasun, R., Nelson, D., Coia, L., **Curran, W.**: Quality of life (QOL) and neuropsychological evaluation (NSE) for patients with malignant astrocytomas (MA), RTOG 91-14. ASTRO Scientific Program, Miami Beach, FL, 1995
- McGee, K.P., Fein, D.A., Lee, W.R., Hanlon, A.L., Ridge, J.A., Langer, C.J., **Curran, W.J.**, Coia, L.R.: Pretreatment hemoglobin level influences local control and survival of T1-T2 squamous cell carcinomas of the glottic larynx. ASTRO Scientific Program, Miami Beach, FL, 1995
- Alden, M.E., O'Reilly, R.C., Topham, A., Lowry, L.D., Brodovsky, H., **Curran, Jr., W.J.**: Elapsed radiation treatment time is predictive of survival outcome among patients with advanced head and neck cancer receiving sequential chemotherapy and radiation therapy. RSNA Scientific Program, Chicago, November, 1995
- Werner-Wasik, M., Rudoler, S., Preston, P.E., Downes, B.M., Andrews, D., Corn, B.W., Rosenstock, J., **Curran, W.J.**: Immediate side effects (use) of stereotactic radiotherapy and radiosurgery. LINAC Radiosurgery-1995, Orlando, FL, 1995
- Valicenti, R.K., Waterman, F.M., Croce, R.J., Corn, B., Suntharalingam, N., **Curran, Jr., W.J.**: Efficient CT simulation for conformal radiotherapy of prostate carcinoma. American Radium Society, San Francisco, CA, April, 1996
- Scott, C.B., Scarantino, C., Urtasun, R., Movsas, B., Jones, C.V., Simpson, J.R., Fischbach, A.J., **Curran, W.J.**: Validation and predictive power of radiation therapy oncology group (RTOG) recursive partitioning analysis classes for malignant glioma patients: A report using RTOG 90-06. ASTRO 38th Annual Meeting, Los Angeles, CA, 1996

Exh B

**CURRICULUM VITAE**

**NAME** Indra J. Das, Ph.D., FIPEM, FAAPM

**PRESENT POSITION** Professor of Radiation Oncology  
and Chief of Clinical Physics

**OFFICE ADDRESS** Department of Radiation Oncology  
University of Pennsylvania, 3400 Spruce St, 2 Donner Bldg.  
Philadelphia, PA 19104  
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Tel: (215) 641-2822

**VITAL STATISTICS**

Date of Birth	July 15, 1950
Place of Birth	India
Citizenship	USA
Marital Status	Married
Children	2

**EDUCATION**

B.Sc.	1971	Gorakhpur University, India	(Physics, Chemistry, Math).
M. Sc.	1973	Gorakhpur University, India	(Physics X-rays).
Dip.R.P.	1975	Bombay University, India	(Radiological Physics).
M.S.	1984	University of Wisconsin, Madison, USA	(Medical Physics).
Ph.D.	1988	University of Minnesota, Minneapolis, USA	(Biophysical Science).

**HONORS**

1966	First Division with distinction in maths, High School, U.P., India.
1968	First Division, I.Sc., U. P. Educational Board, India.
1971	First Division, B.Sc., Gorakhpur University, India.
1973	First Division, M.Sc., Gorakhpur University, India.

**POSTGRADUATE TRAINING**

1973-74	DRP Trainee Division of Radiological Protection, Bhabha Atomic Research center Bombay, India.
1974	Junior Research Fellow Cancer Research Institute, Bombay, India.
1984	Internship (Physics) Department of Radiation Therapy, Mayo Clinic and Foundation, Rochester, Minnesota, USA.

**CERTIFICATIONS**

- 1989 American Board of Radiology (Therapeutic Radiological Physics), USA.
- 1990 American Board of Medical Physics (Radiation Oncology Physics), USA.
- 1995 The Registration Council of Scientists in Health care, London, England.

**FELLOWSHIP IN SOCIETIES**

- 1993 FIPEM, Fellow of the Institute of Physics and Engineering in Medicine (IPEM), England; (Formerly known as Institute of Physical Sciences in Medicine, IPSM)
- 2001 FAAPM, Fellow, American Association of Physicist in Medicine, USA.

**AWARDS**

- 1988 Farrington Daniels award of the AAPM for the best article on the Radiation Dosimetry in Medical Physics.
- 1989 Basic Sciences Travel Grant Fellowship of the ASTRO (American Society for Therapeutic Radiology and Oncology).
- 1994 Best paper (2nd place) award of the American Association of Medical Dosimetrists.
- 1995 Medical Physics Travel Award of the AAPM (American Association of Physicists in Medicine).
- 1997 Basic Sciences Travel Grant of the ASTRO (American Society for Therapeutic Radiology and Oncology).
- 2001 AAPM/IPEM Medical Physics Travel Award

**WHO'S WHO**

- 1996- Who's Who in Sciences
- 1999- Who's Who in Medicine and Healthcare

**PRIVILEGED MEMBER**

- 1994- Accreditation Surveyor, American College of Radiology (ACR)
- 1996- Examiner, American Board of Radiology (ABR)
- 2000- ACR Member of Radiation Oncology Practice Accreditation

**POSITIONS HELD**

- 1973-74 DRP Trainee  
Div. of Radiological Protection, Bhabha Atomic Research center, Bombay, India
- 1974 Junior Research Fellow  
Cancer Research Institute, Bombay, India
- 1975-77 Physicist (Lecturer)  
Department of Radiology  
Goa Medical College and Hospital, Panajim, Goa, India



1978-82 Clinical Physicist (Instructor)  
Department of Radiation Therapy  
Nemazee Hospital, Pahlavi/Shiraz University, Shiraz, Iran.

1982 Chief Physicist  
Kingston Public Hospital, Ministry of Health, Kingston, Jamaica.

1982-83 Teaching Assistant (Diagnostic Radiology)  
Department of Medical Physics, University of Wisconsin, Madison, WI, USA.

1983-84 Teaching Assistant (Health Physics)  
Department of Medical Physics, University of Wisconsin, Madison, WI, USA.

1982-84 Research Assistant  
Department of Medical Physics, University of Wisconsin, WI, USA.

1984-87 Research Assistant  
Department of Therapeutic Radiology, University of Minnesota, Minneapolis,  
Minnesota, USA.

1987-91 Assistant Professor & Staff Physicist  
Department of Radiation Oncology, University of Massachusetts Medical Center,  
Worcester, Massachusetts, USA.

1992-93 Associate Professor & Director of Physics  
Department of Radiation Oncology, University of Massachusetts Medical Center,  
Worcester, Massachusetts, USA.

1993-99 Member (=Associate Professor)  
Department of Radiation Oncology, Fox Chase Cancer Center  
7701 Burholme Avenue Philadelphia, PA, USA

1999- Professor of Radiation Oncology and  
Chief of Clinical Physics  
Department of Radiation Oncology, University of Pennsylvania  
3400 Spruce St., 2 Donner Building, Philadelphia, PA, USA

#### TEACHING EXPERIENCE

1975-77 Radiation Physics  
Radiology Residents, and Technologist  
Goa Medical College & Hospital, Panajim, India.

1978-82 Radiation Physics  
Radiology and Radiation Therapy Residents  
Shiraz University, Shiraz, Iran.

1982-83 Diagnostic Radiology  
Graduate students of Medical Physics

University of Wisconsin, Madison, USA.

- 1983-84 Health Physics  
Graduate students of Medical Physics  
University of Wisconsin, Madison, USA.
- 1988-93 Radiation Physics & Introduction. to Computers  
School of Therapy Technologists, Department of Radiation Oncology  
University of Massachusetts Medical Center, Worcester, MA, USA.
- 1993-99 Radiological Physics & Dosimetry  
Radiation Oncology Residents of the Fox Chase Cancer Center  
Philadelphia, PA, USA.
- 1999- Clinical Physics & Dosimetry  
Radiation Oncology Residents of the University Of Pennsylvania  
Philadelphia, Pennsylvania.

**Advisor to Students:**

- 1988 David A Legion, BE, Tulane University, New Orleans, LA
- 1989-92 John F. Copeland, Ph.D., Lowell University (University of Massachusetts at Lowell MA).
- 1992-95 Kashmiri L. Chopra, MS, University of Massachusetts at Lowell, MA
- 1999- Andrew Jones, Ph.D., Hahnemann University, Philadelphia, PA.

**PROFESSIONAL AFFILIATIONS**

**Membership**

- 1975- Life Member  
AMPI (Association of Medical Physicist of India).
- 1979- Full Member  
HPA, IPEM (The Institute of Physics & Engineering in Medicine, England).
- 1982- Full Member  
AAPM (American, Association of Physicist in Medicine).
- 1989- Active Member  
ASTRO ( American Society for Therapeutic Radiology and Oncology)
- 1988-93 Member  
New England Chapter of American Association of Physicist in Medicine.
- 1990- Full Member  
ACMP (American College of Medical Physics).
- 1992- Full Member  
ESTRO (European Society for Therapeutic Radiology and Oncology).
- 1994- Member, ACR (American College of Radiology).

**COMMITTEES**

**Local**

1983-84 Graduate student representative, Department of Medical Physics, University of Wisconsin, Madison, WI.  
 1985-87 Board of Director, CTC University Housing, University of Minnesota, MN  
 1990-93 Member of Faculty Council, University of Massachusetts Medical Center, Worcester, MA.  
 1992-93 Radiation Protection Committee, University of Massachusetts Medical Center, Worcester, MA.  
 1994-99 Radiation Protection Committee, Fox Chase Cancer Center Philadelphia, PA.  
 1999- Educational Committee, Dept. Radiation Oncology, University of Pennsylvania, Philadelphia, PA  
 1999- Advisory Committee, Radiation therapy program of the Gwynedd Mercy College, Gwynedd Valley, PA.

### **National**

1990-96 Radiation Safety Committee, American Association of Physicist in Medicine (AAPM)  
 1992-93 Professional Information and Clinical Relations Committee of the AAPM  
 1993-96 Finance Committee, (AAPM)  
 1997- TG-63: Management of radiation oncology patients with implanted high-Z materials, (AAPM)  
 1998- TG-66: Quality assurance of CT simulators (AAPM)  
 1999- Calibration Laboratory Accreditation Subcommittee, AAPM.  
 2000- Finance Committee, AAPM  
 2001- TG- 69: Radiographic Film for Megavoltage Beam Dosimetry (AAPM)  
 2002- Gynecology Oncology Group (GOG), ACR collaborative committee  
 2002- Medical Dosimetry Certification Board: Liaison from ACMP

### **REFEREE**

Medical Physics (USA)  
 Health Physics (USA)  
 Physics in Medicine and Biology (UK)  
 International J. Radiation Oncology Biology Physics (USA)  
 Radiotherapy and Oncology (Europe)  
 National Science Foundation (USA)  
 Natural Sciences and Engineering Research Council of Canada  
 Journal of Clinical Medical Physics

Associate Editor Medical Physics

### **Grants & Funding**

1988-90 Diffusion Approximation for radiation dosimetry, University of Massachusetts Medical Center, Worcester, MA. (\$45,000)  
 1990-92 Interface dosimetry as a measure of photon beam energy, Nuclear Associate, NY.(\$35,000)

1999 Dose enhancement by high-Z materials in tumors:  
Submitted to National Institute of Health, MD, (\$530,000)

### INVITED LECTURES

- April 16, 1990 "Interface dosimetry at high Z interfaces in megavoltage photon beam", Osaka Prefecture Radiation Research Institute, Sakai, Osaka, **Japan**,.
- Dec. 10, 1991 "Interface dosimetry using diffusion approximation for photon and beta rays", New England Chapter of the AAPM, Worcester, Massachusetts, **USA**,.
- Sept. 6, 1992 "Selection and acceptance testing of high energy linear accelerators", Mafrag Hospital, Abu-Dhabi, **United Arab Emirates**,.
- Sept. 8-11, 1992 "Problems of high Z interfaces in megavoltage photon beam therapy", International Conference on Medical Physics and Radiation Safety, (ICMP-92) Bombay, **India**,.
- Sept. 20, 1992 "Three-dimensional treatment planning systems", UP Chapter of Association of Radiation Oncologist, Regional Conference, Gorakhpur, **India**,.
- June 11, 1993 "Choice of beam energy for radiation oncology", National Cancer Institute & School of Technology, Mahidol University, Bangkok, **Thailand**,.
- July 15, 1993 "Optimum field size and beam normalization in electron beam therapy", Chiangmai University, Chiangmai, **Thailand**,.
- Sept. 9, 1993 "Role of Medical Physicist in Radiation Oncology", Tohanto Regional High School, Bolyston, Massachusetts, **USA**,.
- August 8, 1994 "Backscatter electron treatment", Fox Chase Cancer Center, Philadelphia, Pennsylvania, **USA**,.
- June 30, 1995 "Backscatter electrons for clinical use", University of Arizona, Tucson, Arizona,
- July 31, 1995 "Developments in Backscatter-electron radiation therapy (BSERT)", Research Institute for Advanced Sciences and Technology, University of Osaka Prefecture, Sakai, Osaka, **Japan**.
- Aug., 1, 1995 "Current concept in CT-simulation: Physical aspects", University of Osaka Medical Center, Osaka, **Japan**
- August 3, 1995 "Dosimetry of small fields used in stereotactic radiosurgery", National Cancer Institute & School of Technology, Mahidol University, Bangkok, **Thailand**
- August, 5, 1995 "Clinical implication of interface dosimetry", Siriraj university hospital, Bangkok, **Thailand**.
- May 23-24, 1996 "CT-simulation", First Annual Multidisciplinary Radiation Oncology Conference, Philadelphia, Pennsylvania, **USA**
- June 19, 1996 "Role of CT-simulation in radiation oncology" Universitaire Ziekenhuizen, Leuven, **Belgium**

- June 26, 1996 "Biological and clinical implications of interface dosimetry at low energy x-rays", Het Nederlands Kanker Instituut, Antoni van Leeuwenhoek Ziekenhuis, Amsterdam, **Netherlands**.
- June 28, 1996 "Biological and clinical implications of interface dosimetry", Institut Gustave Roussy, Villejuif, **France**.
- July, 2, 1996 "Role of CT-simulation in radiation oncology" Institute of Cancer Research, Royal Marsden NHS Trust, Sutton, **England**
- October 3-4, 1997 "Extended SSD clinical electron beam dosimetry". The Mid-Atlantic Chapter of the American Association of Physicists in Medicine, University of Virginia Health Sciences Center, Charlottesville, Virginia, **USA**
- October 3-4, 1997 "Tissue inhomogeneity in clinical electron beam dosimetry" The Mid-Atlantic Chapter of the American Association of Physicists in Medicine, University of Virginia Health Sciences Center, Charlottesville, Virginia, **USA**.
- April 23-25 1998 "Advances in beam shaping for conformal therapy: Multi-Leaf Collimator" 2<sup>nd</sup> Radiation oncology conference for nurses, therapists, and Dosimetrists, Philadelphia, **USA**.
- May 13, 1998 "CT simulation", Institut für Röntgendiagnostik der Universität Würzburg, Würzburg, **Germany**
- May 14, 1998 "Biological consequence of interface effects" Kleiner Horsaal im institut für Strahlenschutz, GSF-Forschungszentrum für Umwelt und Gesundheit, Neuherberg, **Germany**
- February 1-5, 1999 "CT simulator and its applications in radiation treatment planning & its quality assurance procedures" Workshop on Advances in Physics of Radiation Oncology, Bhabha Atomic Research Center and Tata Memorial Hospital, Mumbai, **India**
- May 22, 1999 "Beam Modifications: Intensity Modulation with Physical Wedge, Dynamic Wedge Virtual wedge" Third, Radiation oncology conference for Nurses, Therapists, and Dosimetrists, Philadelphia, **USA**.
- October 10, 2000 "Advances in modern treatment: MLC and soft wedges", Department of Radiation Oncology, Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow, **India**.
- February 28, 2001 "MLC: A key for Modern Radiation Treatment", New Jersey Chapter of the AAPM, Iselin, NJ, **USA**.
- July 24, 2001 "Basic film dosimetry", AAPM annual meeting, Salt Lake City, Utah, **USA**.
- March 25, 2002 "Biological and Clinical Implication of high-Z interfaces for dose escalation in tumors", IPBM/AAPM travel award talk at Bristol Haematology and Oncology Centre, Bristol BS2 8ED **UK**.

- March 28, 2002 "MLC", IPEM/AAPM travel award lecture, Elekta Oncology Centre, Crawley, Surrey, UK.
- April 3, 2002 "CT-simulation: Geometric and dosimetric simulation", IPEM/AAPM travel award lecture at Western General Hospital, Edinburgh, Scotland, EH4 2XU, UK.
- April 4, 2002 "CT-simulation" IPEM/AAPM travel award lecture, Clatterbridge Oncology Centre, Bebington, Wirral, CH6 34JY, UK.
- April 5, 2002 "Technological advances: How far have we come in Radiation Oncology" IPEM/AAPM travel award lecture, Christie Hospital NHS trust, Manchester, M20 4BX, UK.
- April 8, 2002 "MLC: An essential tool for IMRT" IPEM/AAPM travel award lecture, Christie Hospital NHS trust, Manchester, M20 4BX, UK.
- April 9, 2002 "Small Field Dosimetry in SRS and IMRT" IPEM/AAPM travel award lecture, Queen Elizabeth Hospital, University of Birmingham, Birmingham, B15 2TH, UK.
- April 10, 2002 "MLC: An essential tool for IMRT" IPEM/AAPM travel award lecture, Royal Marsden NHS Trust & Institute of Cancer Research, Sutton, Surrey, SM2 5PT, UK.
- April 11, 2002 "Biological and Clinical Implication of high-Z interfaces for dose escalation in tumors" IPEM/AAPM travel award lecture, Royal Marsden NHS Trust & Institute of Cancer Research, Sutton, Surrey, SM2 5PT, UK.
- April 12, 2002 "CT-simulation: Geometric and dosimetric simulation", MLC: An essential tool for IMRT" IPEM/AAPM travel award lecture, Royal Marsden NHS Trust, Fulham Road, London, SW3 6JJ, UK.
- April 12, 2002 "Small Field Dosimetry in SRS and IMRT" IPEM/AAPM travel award lecture, Centre for Ionizing Radiation Metrology, National Physical Laboratory, Teddington, TW11 0LW, UK.

## RESEARCH AND PUBLICATIONS

### I. Thesis, Books, Chapters & Proceedings

- B-1. Das I. J.; Biological effects of a LASER beam at cellular level, Thesis Dip. Rad. Physics, Bhabha Atomic Research Center, Bombay, 1974.
- B-2. Das I. J.; Study of dose perturbation at bone-tissue interface in Megavoltage photon therapy: Ph.D. Thesis University of Minnesota, 1988.

- B-3. AAPM Report No.53, Radiation Information for Hospital Personnel, the American Institute of Physics, AIP, Woodbury, NY, 1995.
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### III. PRESENTATIONS (without published abstract)

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- Pr-2. Iannitto J. F., **Das I. J.**, Desobry G. E., Chen H-L. A Radiographic Technique for Acquisition of External Patient Contour. Annual meeting of the AAMD, Salt Lake City, UT, June 5-10, (1994).
- Pr-3. D'Emilio B. S., **Das I. J.**, McGee K. P. An Evaluation of Tabletop Materials for autocontouring in CT Treatment Planning. Annual meeting of the AAMD, Salt Lake City, UT, June 5-10, (1994).
- Pr-4. **Das I. J.**, McGee K.P., Hunt M.A., Schultheiss T.E., Hanks G. E., and Sims C. A pragmatic approach to acceptance testing of a CT simulator. European Symposium on CT-based simulation in radiotherapy, Gent, Belgium, June 16-18, 1994.
- Pr-5. McGee K.P., Martin E.E., Hunt M.A., **Das I. J.**, Schultheiss T.E., and Hanks G.E., Integration of CT-simulation to the picture archives and communication system in radiation oncology. European Symposium on CT-based simulation in radiotherapy, Gent, Belgium, June 16-18, 1994.

- Pr-6. McGee K.P., **Das I. J.**, Schultheiss T.E. Towards a quantitative analysis of digitally reconstructed radiographs (DRRs): finding a path through the maze. PACSRO meeting, July 13-14, Philadelphia, PA, 1994.
- Pr-7. **Das I. J.**, Downes, M. B., Curran W. J., Wasik M. W. and Andrews D. W. Characteristics of a dedicated linear accelerator based stereotactic radiosurgery/radiotherapy unit (Clinac-600SR). The 2nd Congress of the international Stereotactic radiosurgery society, Boston, June 14-17 (1995).
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- Pr-11. Zellmer D. L., Chapman J. D., **Das I. J.**, and Xi F. Microdosimetry and radiobiological enhancement of low energy electrons. XXII Symposium on Microdosimetry, Oxford, UK Sept 29-October 4 (1996).
- Pr-12. **Das I. J.**, Lanciano R. M., Fein D.A., and Movsas B. CT simulation and CT-CT image fusion for reduction of small bowel volume in pelvic irradiation. AcQsim 3rd Annual Users' Conference, Los Angeles, CA October 24-25 (1996).
- Pr-13. **Das I. J.**, Chapman J. D., Zellmer D. L., and Verhaegen F. Interface dosimetry in kilovoltage beams, Kilovoltage dosimetry workshop, Palo Alto, CA, April 14-15, 1997.
- Pr-14. **Das I. J.**, McNeeley S. W., and Cheng C.-W., Effective point of measurements of ionization chambers in electron beams. PA-L-03, AAPM annual meeting, Milwaukee, July 27-31 (1997).
- Pr-15. Cheng C-W., **Das I. J.**, Roehrig H. Characteristics of CEA films for megavoltage portal imaging. AAPM annual meeting, San Antonio, Med. Phys.25, PA-65, A93, (1998).
- Pr-16. **Das I. J.**, Steinberg T. H. Dosimetric undulations in multileaf collimator. AAPM annual meeting, San Antonio, Med. Phys.25, PA-104, A93, 1998.
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October 30, 2002

Robert A McDermott, Esquire  
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Exh C

Dear Mr. McDermott:

The following opinion is based on my careful review of the following records made available for my review:

Records of Drs. Marilyn Miller, David Salinger, Lawrence Feldman, Leslie Wong, Paul Manson, and Robert Spence.

The Complaint against the Defendants

Deposition Records of Drs. David Salinger and Abdurrahman Unal and of Amanda Barge

The Expert Opinions Provided by Drs. Glenn Tonneson, Robert Brookland, James Rodgers, Paul Mason, and Stephen Siebert.

This represents comments on the Barge-Salinger case with specific reference to the culpability of Dr. Salinger in the outcome of management of Mrs. Barge. Specifically, the following issues will be considered:

1. Was the evaluation and management of Mrs Barge prior to radiotherapy medically inappropriate?
2. Was the decision to treat Mrs. Barge with orthovoltage radiotherapy medically appropriate?
3. Was the radiotherapy prescription in terms of field size, dose-per-fraction, and total dose written by Dr. Salinger appropriate?
4. Was Dr. Salinger's review of the machine calibration within the standards in the field?
5. Was Dr. Salinger's review of the physics calculation specific to Mrs. Barge's case appropriate? More specifically, should Dr. Salinger noted that the amount of time for each treatment were numerically larger than would be expected?
6. Should Dr. Salinger noted that Mrs. Barge's reaction to the first and subsequent treatments was unusual and a warning of an overdosage?
7. Was Dr. Salinger's management of Mrs. Barge after the discontinuation of therapy appropriate?

Comments are based upon my personal review of the above listed documents.

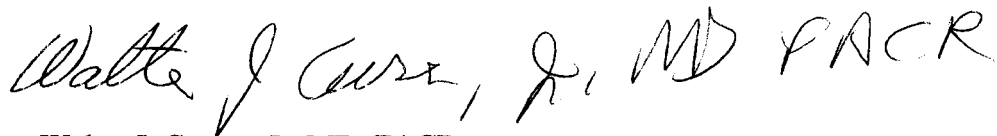
1. The management of Mrs. Barge by both Dr. Salinger in recommending radiotherapy and by other participating physicians in referring her to a radiation oncologist was appropriate.
2. The decision to employ orthovoltage radiotherapy was appropriate. Dr. Salinger acknowledges a modest level of experience in employing orthovoltage in his deposition. There is however nothing about his decision about employing this therapy in my opinion which was not appropriate.
3. The field size and placement as best I can ascertain from the available records, the radiotherapy dose-per-fraction and the total dose are appropriate. The total dose is in fact on the low side of the range of acceptable radiation doses which should be employed for such patients.
4. The machine calibration and acceptance testing was handled by Dr Ying, the medical physicist involved with Dr. Salinger's center. It is the responsibility of the physicist in such a facility to ensure that the equipment employed to provide radiation oncology services is fully functional and properly calibrated. There is no reasonable expectation that the treating radiation oncology physician would be expected to detect an error on the part of a certified physicist to correctly test and calibrate the equipment. Training in radiation equipment testing for radiation oncology physicians is virtually non-existent due to the extremely specialized nature of the process. There is no requirement that the treating physician "sign-off" on the machine acceptance testing as the process is technically managed by a certified physicist.
5. Dr. Salinger signed off on a prescription which delivered therapy for over seven minutes during each treatment in order for the target to receive 250 cGy. It is documented in the chart that Dr. Salinger reviewed the treatment plan and approved it, and there is no reason to doubt this. Given the complexity of radiation oncology treatment planning and variety of planning and delivery systems, it is both understandable and defensible that a radiation oncology physician would be reliant on his dosimetry and physics staff for matching the number of treatment minutes to the radiation prescription. It is my opinion that Dr. Salinger was performing his duties at an appropriate standard of care when he accepted the calculations of his RT dose prescription as provided by the physicist Dr. Ying.
6. Dr. Salinger did document the symptoms Mrs. Barge noted after the first several treatments. It is true that patients sometimes note subjective symptoms of burning or discomfort early on in the course of a radiation course which tend to subside after several treatments. Generally, such symptoms are not a sign of overtreatment or any subsequent morbidity. It is clear that Dr. Salinger did terminate therapy after the objective evidence of side effects became clear. I disagree with the expert testimony provided by Dr. Tonneson and Brookland that Dr. Salinger was negligent in not terminating the patient's therapy at an earlier date. I believe, to a high degree

of medical certainty, that Dr. Salinger's evaluation of the patient during therapy was appropriate.

7. Dr. Salinger's care and referral of the patient upon discovery of her morbidity was appropriate.

In summary, I believe to a high degree of medical certainty, that the medical management of Ms. Amanda Barge by Dr. David Salinger does not constitute negligence in any manner.

Sincerely

A handwritten signature in cursive script that reads "Walter J. Curran, Jr., MD FACP". The signature is written in dark ink and is positioned above the printed name.

Walter J. Curran, Jr, MD, FACP



UNIVERSITY OF  
PENNSYLVANIA  
MEDICAL CENTER

Department of Radiation Oncology

Division of Medical Physics

University of Pennsylvania School of Medicine  
Hospital of the University of Pennsylvania

Exh D

October 14, 2002

B. Craig Black, Esquire  
McKissock & Hoffman, PC  
Attorneys at Law  
2040 Linglestown Road  
Suite 302  
Harrisburg, PA 17110

**Subject: Barge vs. Salinger et al.**

Dear Mr. Black:

I have reviewed the documents (enclosures 1-21) sent by you dated September 19, 2002. Without seeing the kilovoltage unit and measuring the radiation output (dose rate) myself, it is rather difficult to find exact cause of over exposure to Mrs. Barge; however, I can state following observations with reasonable degree of confidence based on the data provided to me.

1. Based on the description and medical findings, there is no doubt that Mrs. Barge did receive significantly higher dose than was prescribed by Dr Salinger. This could have been avoided, if physicist had proper training and knowledge of kilovoltage therapy.
2. I found that Dr. William Ying had no formal training in medical physics. Temple University does not have any training program in medical physics. Also as I can recall, there was no training record in Fox Chase associated with Dr Ying (I used to work at Fox Chase till 1999).
3. Dr. Ying was not competent to calibrate the Universal Treatmaster Superficial unit. He is not a 'qualified physicist'. A qualified physicist is one who is certified by the American Board of Radiology (ABR) or American Board of Medical Physics (ABMP). Dr. Ying does not have any certification. He should be working under direct supervision of a board-certified physicist.
4. The acceptance and commissioning data presented is extremely poor and inconsistent with usual norms. There are numerous typos and contradicting data in various exhibits. There is no date, clear logic and explanation on the data collected. For example, time of measurement is mentioned in seconds as well as in minutes. The beam parameters are not stated clearly. There are numerous hand-written data that cannot be understood. Often, the data pages have no dates and hence the sequence of events cannot be fully understood.

*Barge vs Salinger (1/4)*

5. Dose in a kilovoltage beam is very complex as shown below:

$$D(d) = \frac{kV^n mAs}{d^2}$$

Where D is dose at a distance, d, k is constant depends on the x-ray unit, V is kilovoltage, n is variable with a value between 2-3 and mA is current in milliamperes and s is time in seconds. It is clearly obvious that dose is very sensitive to the kilovoltage. Slight changes in tube kilovoltage cause square or cube order change in output (dose rate). This unit might not have a voltage stabilizer and/or line voltage regulator.

6. Apart from above equation tube filtration is critical in dosimetry. Every tube has inherent filtration (this is referred in terms of half value layer, HVL, in aluminum or copper). For low energy it is usually in aluminum. External filters are added to increase effective beam energy (harder beam), higher HVL at expense of lowering output. Hence for proper calibration of the unit following parameters are extremely critical;

- i. kV = kilovoltage applied to the tube
- ii. mA = tube current in milliamperes
- iii. filter = defines the HVL (energy of the beam)
- iv. SSD = source to skin distance, d
- v. Cone size = area of the treated field
- vi. Design of cone metallic or plastic
- vii. Shielding (some times lead shields are used to prevent normal tissue).

If you look at the exhibits, these parameters are not completely filled out. Reports are poorly documented. It is extremely difficult to decipher information from such documents. Items iii, vi and vii are missing in patient's chart and calculation sheet, which is subject to serious error. There are a great deal of published data suggesting that metallic cone and lead cutout could contribute upto 16-20 folds dose increase to very superficial region of the skin (Aldrich *et al* 1992, Das 1998, Das 1997, Das and Chopra 1995, Stern and Kubo 1995).

7. Common sense knowledge about kilovoltage unit should have avoided this crisis. For example there is a report on this type of machine by Wayne A. Meyers addressed to Dr. Miller of Lebanon. He states an exposure rate of 615 R/min for a HVL of 0.4 mm Al for 3 cm cone at 15 cm SSD. It is hard to understand how Dr. Ying failed to ignore the report during commissioning and first treatment.
8. There is a recent report (Klevenhagen *et al* 1996) that could have been used for calibration of this machine.
9. Dr. Ying has signed the treatment sheet daily even if he did not measure the dose, did not checked the set up, nor participated in clinical care.



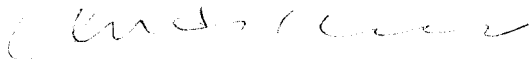
10. Dr. Ying has signed a special physics consultation form, which is again improper and unethical since he did not perform any special work for the patient.
11. It is common knowledge that x-ray tube rapidly changes output close to its death. Dr. Ying observed the calibration of this machine from May 18, 1999 - July 22, 1999 and found the output constantly rising. It could have been a siren bell that tube is dying and not suitable for clinical use. Even before the first treatment, the measured dose was reported to be 50.5 cGy/min compared to the 32.54cGy/min used for Mrs. Barge treatment. Dr Ying failed to even consult with his own group (Dr. Walker, president of Consulting Physics and Regulatory Services, CPRS).
12. There is a large discrepancy in calibrations among various physicists of this group (CPRS). In various reports and exhibits, output values range from 32.54 cGy/min to 615 cGy/min (nearly 20-folds increase). In such situation, CPRS should have taken the responsibility to rectify the differences and hence avoided such a crisis. A good practice is to have dose within  $\pm 2\%$ .
13. Vender (Nixon Equipment Corp & EquiMed) who sold the unit to Heritage Hill Cancer Center should also take responsibility of selling a dying tube that should not have been installed.

Summary:

This incidence could have been avoided with proper equipment, training, coordination, supervision and double check.

Please feel free to contact me for any discussion on this matter. I shall be happy to clarify, discuss, or amend the findings with additional documentation.

Sincerely,



Indra J. Das, Ph.D. FIPeM, FAAPM  
Professor & Chief of Clinical Physics  
Department of Radiation Oncology

References:

- Aldrich J E, Meng J S and Andrew J W 1992 The surface doses from orthovoltage X-ray treatments Med. Dosim. 17 69-72*
- Das I J 1998 Broad beam attenuation of kilovoltage photon beams: effect of ion chambers Br. J. Radiol. 71 68-73*
- Das I J 1997 Forward dose perturbation at high atomic number interfaces in kilovoltage X-ray beams Med. Phys. 24 1781-1787*
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- Klevenhagen S C, Aukett R J, Harrison R M, Moretti C, Nahum A E and Rosser K E 1996 The IPeMB code of practice for determination of absorbed dose for x-rays below 300kV generating potential (0.035 mm Al-4 mm Cu HVL; 10-300 kV generating potential) Phys. Med. Biol. 41 2605-2625*
- Stern R L and Kubo H D 1995 Considerations for superficial photon dosimetry Med. Phys. 22 1469-1470*

EXH E

**STATEMENT OF COUNSEL THAT PERSON OR COMMITTEE  
WITH SETTLEMENT AUTHORITY HAS BEEN NOTIFIED OF  
THE REQUIREMENTS OF AND POSSIBLE SANCTIONS  
UNDER LOCAL RULE 16.2**

I, B. Craig Black, Esquire, as attorney for Defendants David J. Salinger, M.D., and Keystone Oncology, LLC., and as a member of the bar of this Court, hereby state that notice of the requirements of Local Rule 16.2 has been provided to the following:

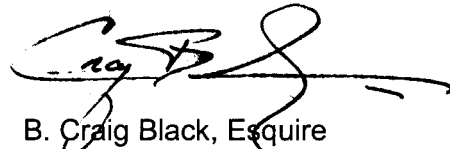
Ms. Lisa Pratt  
Claim Representative  
Pennsylvania Property and Casualty Guarantee Association  
One Penn Center at 1620 Suburban Station  
1617 J.F. Kennedy Boulevard  
Philadelphia, Pennsylvania 19103

And

Louis J. Sheehan Esq.  
Attorney Examiner  
M-Care Fund  
8th Floor;  
30 North 3rd Street  
Harrisburg, Pennsylvania 17101

A true and correct copy of the correspondence dated February 3, 2003 evidencing notice is attached to this statement.

Respectfully Submitted,  
McKissock & Hoffman, P.C.



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**CERTIFICATE OF SERVICE**


I hereby certify that I am this day serving a copy of the foregoing **Pre-trial Conference Memorandum of Defendants David J. Salinger, M.D. And Keystone Oncology, LLC** upon the person(s) and in the manner indicated below, which service satisfies the requirements of FRCP 5(b), by depositing a copy of same in the United States Mail, first-class postage prepaid, addressed as follows:

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(*Counsel for William Ying, Ph.D., Comprehensive Physics and  
Regulatory Services, Ltd. and Equimed, Inc.*)

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By:   
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Attorneys for Defendants, David J. Salinger, M.D.  
and Keystone Oncology, LLC

Dated: 2/19/03